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2024-2025 ACAMDEIC CATALOG  
CLOVER PARK TECHNICAL COLLEGE

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# 2024-2025 Academic Catalog

2024-2025

Clover Park Technical College

Academic Catalog

*Published July 31, 2024*

# Welcome to Clover Park Technical College

Dear Student,

Welcome to Clover Park Technical College!

As President of Clover Park Technical College, it gives me great pleasure to extend a warm welcome to each of you as you take the next step forward on a transformational journey toward technical expertise and professional success. Whether you are entering college for the first time or returning to school to advance your career or pursue your passion, you are now an integral part of our vibrant and diverse CPTC community.

At CPTC, we believe in the power of education to uplift individuals and provide pathways to economic mobility. We are here to support you in reaching your goals and realizing your potential, and we are committed to providing an environment where you feel valued, supported, and empowered to succeed.

As you explore the pages of this catalog, you will discover a wide range of programs in more than 40 technical fields designed to meet the needs of today's rapidly evolving workforce. CPTC's programs equip you with the skills, knowledge, and hands-on experience essential for success in your chosen field. As experts in their respective fields, faculty maintain strong ties with business and industry and they pay attention to current trends. As a result, CPTC graduates are highly regarded by employers for their relevant knowledge and technical skills.

CPTC's commitment to student excellence goes beyond academics. We are dedicated to fostering a culture of belonging where every voice is heard and every perspective is respected. We celebrate the richness of our diverse community and embrace the unique talents and backgrounds that each student brings to our campus.

As you embark on this journey, know that you are not alone. Our dedicated faculty, staff, and fellow students are here to guide and mentor you every step of the way, cheering you on as you strive for excellence and realization of your full potential.

I am excited to welcome you to the Clover Park Technical College family and look forward to seeing the incredible contributions you will make to our community and beyond.

With warm regards,

*-Dr. Joyce Loveday, President*

## About this version

Every effort has been made to ensure the accuracy of the Clover Park Technical College 2024-2025 Academic Catalog.

Up-to-date information about the college is maintained on its website at [www.cptc.edu](http://www.cptc.edu).

Catalog certified as true and correct for content and policy.  
Dr. Joyce Loveday, President

# Who, Where, and What We Are

As a vital member of Washington's higher education system, Clover Park Technical College offers more than 40 programs grouped into 7 schools:

1. Advanced Manufacturing
2. Aerospace and Aviation
3. Automotive and Trades
4. Business and Personal Services
5. Health and Human Development
6. Nursing
7. Science, Technology, Engineering, and Design.

Clover Park Technical College currently operates out of two locations, its main campus in Lakewood, WA and a satellite campus 15 miles to the south east at South Hill in Puyallup, WA. The 73.6-acre Lakewood campus, a former Navy supply depot during WWII, was acquired in 1954. As a former Navy supply depot with a landing strip, the Lakewood campus has a linear configuration in the east-west direction with most buildings arranged along an east-west pedestrian spine. Building 31 is an outlier at the northwest corner of the site.

Clover Park's South Hill campus is 9.97 acres and holds a 2-story building attached to an airplane hangar.

CPTC helps students redefine education to meet their needs. The college offers courses online and on campus for students getting ready for their first career, their next step within their career, or a new career. While the college has been part of the Pierce County community since the 1940s, its program and course offerings are consistently reevaluated to provide the most relevant and innovative training for in-demand career areas.

## Physical Addresses

**LAKEWOOD CAMPUS**  
4500 Steilacoom Blvd SW  
Lakewood WA 98499-4004  
253-589-5800

**SOUTH HILL CAMPUS**  
17214 110TH Ave E  
Puyallup WA 98374-9509  
253-583-8904

## Board of Trustees

The Clover Park Technical College Board of Trustees is composed of five community college district residents who are appointed by the governor to a five-year term. The board sets policy for the institution and delegates administrative authority to the president of the college.

- **Carol Mitchell**
- **Alice Phillips**
- **Eli Taylor**
- **Jesus Villegas Rivera**
- **Tong Zhu**

Additional information about the Board of Trustees, including current board positions, trustee biographies, and meeting information, can be found at: [www.cptc.edu/trustees](http://www.cptc.edu/trustees)

## Our Strategic Goals

### Mission

Educating tomorrow's workforce.

### Vision for Change

CPTC will be a profoundly accessible center of learning and credentialing that provides economic mobility and eliminates inequities in students' educational and workforce outcomes.

### Our Goals

Five strategic goals provide guidance as we work to achieve our mission of *Educating tomorrow's workforce*. The five goals are organized to form the acronym **CARES**.

- **Community of Care** - Achieve an environment in which students and staff experience belonging, support, and the opportunity to reach their full potential.
- **Access** - Increase access and enrollment among historically marginalized populations who have not equally benefited from the rewards of higher

education and the skills and credentials we offer.

- **Retention and Completion** - Improve institutional performance in retention and completion for all students, with a focus on students who have been historically underserved by CPTC.
- **Employment** - Work with stakeholders to prepare a skilled workforce, increase graduate employment rates, and reduce inequities in wages and employment, particularly for populations who are historically underemployed.
- **Sustainability** - Achieve economic vitality, social equity, and environmental sustainability within our institution and community. We invite you to learn more about the 2023-2028 Strategic Plan at [www.cptc.edu/about/vision](http://www.cptc.edu/about/vision).

## Accreditation

Clover Park Technical College is a Member institution with the Northwest Commission on Colleges and Universities (NWCCU). Clover Park Technical College's accreditation status is Accreditation Reaffirmed. The NWCCU's most recent action on the institution's accreditation status in January 2022 was to reaffirm accreditation. NWCCU is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA).

Inquiries regarding an institution's accredited status by the NWCCU should be directed to the administrative staff of the institution.

Individuals may also contact:

Northwest Commission on Colleges and Universities  
8060 165th Avenue N.E., Suite 100  
Redmond, WA 98052 (425) 558-4224 [www.nwccu.org](http://www.nwccu.org)

Accreditation by the NWCCU refers to the institution as a whole. Therefore, statements like "fully accredited" or "this program is accredited by the Northwest Commission on Colleges and Universities" or "this degree is accredited by the Northwest Commission on Colleges and Universities" are incorrect and should not be used.

The NWCCU is an independent non-profit organization recognized by the U.S. Department of Education and the Council for Higher Education Accreditation. It is the regional authority on educational quality and institutional effectiveness of higher-education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah and Washington. It fulfills its mission by

establishing accreditation criteria and evaluation procedures by which institutions are reviewed.

Clover Park Technical College first received accreditation through NWCCU in December 1999.

## Program Accreditations and Certifications

Accreditation and certification have been granted to specific programs at Clover Park Technical College by:

- American Dental Association
- American Society of Health Systems Pharmacists
- Commission on the Accreditation of Allied Health Education Programs
- Federal Aviation Administration
- National Accrediting Agency for Clinical Laboratory Sciences
- National Automotive Technicians Educational Foundation
- National League for Nursing Commission for Nursing Education Accreditation
- Washington State Department of Health
- Washington State Department of Licensing
- Washington State Nursing Care Quality Assurance Commission

## Advisory Committees

Each career program at CPTC is guided by an advisory committee composed of employers and employees in the field. These committees meet at least two times each year to provide recommendations about methods, procedures, equipment, and curriculum and to ensure that each program meets or exceeds the industry standards of that particular occupation.

## Clover Park Technical College Foundation

The Clover Park Technical College Foundation is a 501(c)(3) non-profit organization dedicated to the needs of CPTC students and programs. Established in 1992, the Foundation is overseen by a volunteer board of up to 24 members. Board membership reflects the diversity of the

community and the industries served by the college.

The Foundation changes lives by:

- Raising funds for students, programs, equipment, technology, and capital projects.
- Introducing new friends and future supporters to the college.
- Helping students through difficult times, empowering them to stay in school with scholarships and emergency assistance funds.
- Supporting employee growth, development, and appreciation.
- Contributing to college-wide programs and initiatives.

The Clover Park Technical College Foundation Board of Directors is composed of local business and community leaders who volunteer their time and donate their talents and resources to raise friends and funds for the college. The funds raised through their efforts support the college and students through student scholarships and emergency grants, allow the college to acquire state-of-the-art equipment and technology, and offer faculty and staff professional development awards.

#### **Officers**

- Joe Lydic, President
- Thuli Lushaba, Secretary
- Mary Green, Treasurer
- David Harkness, Director at Large
- Caroline Henry, Director at Large

#### **Directors**

- Alden Bishop
- Harley Moberg
- Lucas Holm
- Nancy Sternitzky
- Kris Shegrud
- Thushari Gooneratne

#### **Ex Officio Directors**

- Samantha Dana, Interim Executive Director, Associate Vice President for Institutional Effectiveness
- Eli Taylor, CPTC Trustee Liaison
- Dr. Joyce Loveday, CPTC President
- Lisa Beach, CPTC Executive Director of Operations

# Becoming a Student

## Getting Started at CPTC

### 4 Easy Steps

#### 1. Connect with an Entry Coordinator

- All new students must meet with an Entry Coordinator in the Welcome Center (Bldg. 17).
- Explore career pathways and college services and discuss entry requirements.

#### 2. Apply for Admission & Financial Aid

- Apply for admission online at [www.cptc.edu/apply](http://www.cptc.edu/apply).
- Complete your Free Application for Federal Student Aid (FAFSA) online at [www.studentaid.gov](http://www.studentaid.gov) or your Washington Application for State Financial Aid (WASFA) at [www.wsac.wa.gov/wafsa](http://www.wsac.wa.gov/wafsa). The College code for both applications is 015984.
- Check FAFSA/WASFA status on the financial aid portal on the ctcLink Student Services Center, Financial Aid tab and submit all additional documents to the Financial Aid Office (Bldg. 17).

#### 3. Assess & Review Your Placement

- Review placement options with an Entry Coordinator in the Welcome Center (Bldg. 17).
- Select a program, review education plan, and choose your classes.

#### 4. Register for Classes, Pay Tuition, & Buy Books

- Register for classes online at [www.cptc.edu/register](http://www.cptc.edu/register).
- Pay tuition and fees, purchase your books, and get started!

Clover Park Technical College is committed to providing equitable access to College events, programs, trainings and services to individuals with disabilities. If you need any disability related accommodation in order to access programs, trainings and/or services offered by CPTC, please contact the Disability Resources for Students (DRS) at [disabilityresources@cptc.edu](mailto:disabilityresources@cptc.edu). Please be aware that some accommodations require several days to arrange and providing as much advance notice as possible of your need for accommodations will increase the probability that we

will be able to provide the accommodation when needed.

**Our staff is here to help you succeed at Clover Park Technical College.**

## Assessment

Students entering technical programs that have academic courses may be required to take the directed self-placement assessment in the Welcome Center. If a placement assessment has been taken within the past 24 months at another college or special agency, the assessment results can be evaluated in the Enrollment Services Office or by an Entry Specialist in the Welcome Center and posted to the student record.

There is no fee for the directed self-placement assessment.

## College Entry

Students are eligible for entry to full-time programs at Clover Park Technical College as follows:

In accordance with WAC 131-12-010, any applicant for admission to Clover Park Technical College shall be admitted when, as determined by the chief administrative office or their designee, such applicant:

1. Is competent to profit from the curricular offerings of the college.
2. Is 18 years of age or older; or
3. Is a high school graduate (diploma or GED certificate); or
4. Has applied for admission under the provisions of a student enrollment options program, such as Running Start, Elective High School, or other local enrollment option program.

Some programs have additional entry requirements, including mandatory advising or additional fees. This information may be found in the program description section of the college catalog or on the program page of the CPTC website.

Clover Park Technical College entry applications are available online at [www.cptc.edu/apply](http://www.cptc.edu/apply), through the Welcome Center in Building 17, the Advising & Counseling Office in Building 17, or at a Program Information Session. Program Information Sessions occur



every second and fourth Wednesday of each month when classes are in session.

Visit [www.cptc.edu/info-sessions](http://www.cptc.edu/info-sessions) for details.

## Exceptions

Students age 16 and over who meet the provisions of “Title III-Adult Education Programs” may enroll in certain adult basic education classes. Individuals admitted into such classes will be allowed to continue as long as they are able to demonstrate, through measurable academic progress, an ability to benefit.

Individuals who don’t meet the eligibility criteria for entry may appeal for special admission on a course-by-course basis. Criteria for granting an appeal are competency at an appropriate academic level and/or artistic or technical skill level, as well as the ability to participate in an adult learning environment. The college does not desire to replace or duplicate the functions of the local public schools. Appeals may be filed with the Vice President for Instruction or designee.

## Paying for College/Applying for Financial Aid

- Create a financial plan on how to pay for college, and apply early for possible financial aid, including scholarships, grants, and loans.
- Submit a Free Application for Federal Student Aid (FAFSA) application at [www.studentaid.gov](http://www.studentaid.gov) or a Washington Application for State Financial Aid (WASFA) application at [www.wsac.wa.gov/wafsa](http://www.wsac.wa.gov/wafsa).
- If you apply for financial aid, you must complete all steps of the Financial Aid Application Process by posted deadlines at [www.cptc.edu/financial-aid/steps](http://www.cptc.edu/financial-aid/steps).
- Financial aid information and deadlines are available at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid).
- Using veteran benefits? Visit [www.cptc.edu/veterans](http://www.cptc.edu/veterans).
- Need additional educational funding and resources? Workforce Development offers non-traditional funding sources and resources for those who qualify through our WorkFirst, Worker Retraining, Opportunity Grant, and Basic Food Employment and Training (BFET) programs. Check out funding sources [www.cptc.edu/workforce-development](http://www.cptc.edu/workforce-development).
- Receive assistance with FAFSA, WASFA, loan

applications and document fee by contacting the EOC Advisor at [eoc-advisor@cptc.edu](mailto:eoc-advisor@cptc.edu).

## Agency-Funded Students

Persons who qualify for assistance from the Division of Vocational Rehabilitation of the State of Washington or neighboring states, the Department of Labor and Industries, the Washington State Department of Social and Health Services, WorkSource, or the Employment Security Department may attend programs at Clover Park Technical College.

Agencies or students must provide the College with documentation for funding before classes begin.

The funding coordinator is available to answer your questions 8 a.m.-4:30 p.m., Monday-Friday, in Bldg. 17, Rm. 103E, or can be reached at 253-589-5663 or [agencyfunding@cptc.edu](mailto:agencyfunding@cptc.edu).

## Title IV Student Complaint Process

The Higher Education Act (HEA) prohibits an institution of higher education from engaging in a “substantial misrepresentation of the nature of its educational program, its financial charges, or the employability of its graduates.” 20 U.S.C. §1094(c)(3)(A). Further, each state must have “a process to review and appropriately act on complaints concerning the institution including enforcing applicable State laws.” 34 C.F.R. § 600.9. The Washington State Board for Community and Technical Colleges (SBCTC) maintains a process to investigate complaints of this nature brought by community and technical college students in the state of Washington. For more information, contact the SBCTC Student Services Office at 360-704-4315.

## Dual Credit for High School Students

### Career & Technical Education (CTE)

CTE dual credit courses allow students in grades 9-12 to earn both high school and college credit in a career field that interests them. These courses are taught at the local high school by high school teachers. Student can gain the skills necessary to enter the workforce or continue at college to earn a certificate or degree to enter those careers. Please contact your high school counselor for specific agreements. For more information on dual credit and other options contact Pierce County Careers Connection at 253-

583-8803 for more information.

## Running Start

Running start is a state-wide dual credit program where high school juniors and seniors can take college courses for both high school and college credit. Many of our career training programs give students the option to earn an associate degree, as well as their high school diploma. During the program, running start students attend CPTC to complete college-level courses that count toward an associate degree. However, running start students remain attached to their home high schools. The benefit of this connection is that students have the option to still participate in all activities their high school offers (prom, sports teams, homecoming, clubs, AP course, etc.) and complete any high school classes they need to graduate. Running start students earn their high school diplomas in two different ways: Through their home high school which will require them to meet standard state graduation requirements or through CPTC upon completion of an associate degree. For more information contact Kevin Kildun, Running Start Advisor 253.589.5701.

## College in the High School

College in the high school courses are college-level courses taught by high school teachers in their high school and are available to students in the 9th-12th grades. High schools and colleges enter into agreements that ensure courses taken in the high school align with college programs, prepare students for careers and/or postsecondary education and can lead to college credit. Courses may be either academic and/or career and technical education focused. There are no tuition or fees for college in the high school courses. For more information contact your high school counselor.

## Advanced Placement (AP)

Clover Park Technical College grants credits to students who have earned a score of three or more on the Advanced Placement Tests of the College Board in the subject areas listed on the Course Equivalency Guide (visit [www.cptc.edu/transfer-to](http://www.cptc.edu/transfer-to) and scroll to “Advanced Placement”). For more information about AP study and

testing, please see the AP counselor at your high school or go to [www.collegeboard.com](http://www.collegeboard.com) and search for Advanced Placement. When you take your test, be sure to indicate that the results should be sent to CPTC.

## Cambridge International (CI)

Cambridge International students who have earned successful CI higher-level test scores may request college credit for CI higher-level work that is the equivalent of CPTC degree and certificate course requirements. For more information, please contact the Credentials Evaluator at 253-589-6003 or email [evaluator@cptc.edu](mailto:evaluator@cptc.edu).

## International Baccalaureate (IB)

International Baccalaureate students who have earned successful IB higher-level test scores may request college credit for IB higher-level work that is the equivalent of CPTC degree and certificate course requirements. For more information, please contact the Credentials Evaluator at 253-589-6003 or email [evaluator@cptc.edu](mailto:evaluator@cptc.edu).

## Northwest Career and Technical High School

253-589-5770 | [www.cptc.edu/high-school](http://www.cptc.edu/high-school)

Northwest Career & Technical High School is a school of choice on the Clover Park Technical College campus that provides a rigorous educational program combined with career guidance and high-quality career and technical education. Students can:

- Earn a high school diploma from Northwest Career & Technical High School.
- Earn a certificate of initial competencies in their chosen career path.
- Are prepared to articulate into postsecondary education and training opportunities.
- Can earn a certificate or a degree at Clover Park Technical College.

## Adult High School Completion

253-589-5770 | [www.cptc.edu/high-school](http://www.cptc.edu/high-school)

Adult High School classes are offered for persons 20 years of age or older who are not enrolled in a regular high school and want to earn an Adult High School diploma. These classes are academic in nature and meet Washington State requirements for High School Completion. More information is available from Northwest Career & Technical High School at 253-589-5770 or in Building 14.

## Veterans Education Benefits

253-589-5581 | [www.cptc.edu/veterans](http://www.cptc.edu/veterans)

In compliance with the Harry W. Colmery Veterans Educational Assistance Act of 2017 and RCW 28B.15.624 Early Course Registration for Eligible Veterans and National Guard Members, Clover Park Technical College provides early course registration for eligible veterans and spouses using VA education benefits. Visit [www.cptc.edu/veterans](http://www.cptc.edu/veterans) for more information; scroll to the bottom of the page. Please see the Academic Calendar for priority registration for veterans and spouses using VA education benefits.

Most programs offered by Clover Park Technical College are fully approved for benefits under the following Veterans Administration regulations:

Chapter 30—Montgomery GI Bill®  
Chapter 31—VA Rehab (pre-approved by Vocational Readiness and Employment)  
Chapter 33—Post 9/11 GI Bill®  
Chapter 35—Dependents  
Chapter 1606—Reserves  
Chapter 1607—Reserves Active

Selected programs of study at Clover Park Technical College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>.

### Recruiting Standard of Conduct

Selected programs of study at Clover Park Technical

College are approved by the Workforce Training and Education Coordinating Board's State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

Clover Park Technical College does not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any persons or entities engaged in any student recruiting or admissions activities or in making decisions regarding the award of student financial assistance.

### Veterans Services and Resources Contact Info

| 253-589-5581  
vaoffice@cptc.edu | [www.cptc.edu/veterans](http://www.cptc.edu/veterans)  
Veterans Services Office | Building 17, Room 103 |

| [www.cptc.edu/vrc](http://www.cptc.edu/vrc)  
Veterans Resource Center | Building 2, Room 109 | [veteran.navigator@cptc.edu](mailto:veteran.navigator@cptc.edu) | 253-589-5966

### Staff/Certifying Officials

Dee Ladson, Veterans Services Manager, Certifying Official

Terrie Shanko, Aviation Program Specialist, Certifying Official

Jason McNamara, Veterans Certifying Official

### /Practicum Veterans and Externships/Internships, Clinical

- CFR 21.4233 & CFR 21.4265
- WTB Licensed Schools WAC 490-105-150 (#5 a-d) Program, facility, and equipment standards:

WAC 490-105-150(5) Schools that have an externship/internship, clinical/practicum, or similar requirement designed as a part of a program shall be approved as part of the program provided the externship/internship. Those programs must comply with the following:

- (d) Ensure positions are available for all enrolled students as they progress to the externship/internship portion of the program and that students are timely placed so that the educational instruction is continuous.
- (c) The location of the externship/internship may be at the school's primary licensed location, at an approved on-site auxiliary location, or another location so long as an affiliation agreement or contract is in place and shall be

made available to the agency upon request.

(b) Be under the coordination of a qualified instructor or faculty member and designate for the direct on-site supervision of the student to ensure that all hours are completed, and program requirements are met.

(a) Be part of the approved curriculum of the school and described in the school catalog and directly relate to the intended area of employment.

### **85/15 Rule**

Schools should limit student enrollment to 85% veteran enrollment for each separately approved educational or vocational objective. In the event that a veteran wishes to enroll in a program that has already reached the 85% cap, he or she may do that but will not be eligible for VA funding. Chapter 35 and 31 students may still enroll even if the 85 percent has been realized.

## **International Students**

We welcome international students from around the world to Clover Park Technical College. We provide personalized assistance to our international students every step of the way, from entry to graduation.

### **Entry**

To start your application process, please contact us and take the first step toward a bright future. Join other international students who have discovered the outstanding programs at Clover Park Technical College.

You can become an international student at Clover Park Technical College by following these easy steps:

- Fill out the Admission Application and the Financial Responsibility forms:
- Request an application packet by emailing [admissions@cptc.edu](mailto:admissions@cptc.edu) to receive digital copies of the documents, or request an application packet by phone at 253-589-5569.
- Send the completed Admission Application and the Financial Responsibility forms, along with other required documents, by mail with your \$70 non-refundable application fee, payable by personal check, money order (in U.S. dollars), or credit card.
- Attach a passport-size color photo to the top right

corner of the application.

### **English Proficiency Requirements**

No TOEFL or IELTS is required for entry if students successfully complete the highest level of Intensive English program at CPTC or at another accredited college/language school.

If students wish to enter directly into one of our professional technical programs without completing the Intensive English program, we accept the following English proficiency test scores:

- TOEFL: A minimum of iBT 61/CBT 173/PBT 500.
- IELTS Academic: A minimum of 5.5 overall band score with no component band score lower than 5.0 (Note: The IELTS component band score requirement may be waived with advisor permission only. Contact the International Education Programs for more information)
- We may consider other proof of English proficiency. Please contact us for more information.

Once we receive the above items and you meet all the entry criteria, we will mail Form I-20 to you. Take the Form I-20 with you to the U.S. Consulate in your country and apply for a student visa.

### **Transfer of CPTC Credits**

Credits earned at Clover Park Technical College may transfer to other public institutions. Please discuss your educational goals with the Outreach & Entry Services staff.

### **Cost of Tuition & Fees**

International students pay non-resident tuition. Visit [www.cptc.edu/tuition](http://www.cptc.edu/tuition) for this year's rates.

Additional fees may be charged for a specific class and are listed at the end of the course descriptions in the Quarterly Class Schedule.

Tuition and fees may change based on State of Washington legislative guidelines.

Housing and other college fees are not inclusive.

Non-refundable CPTC international admission application fee is \$70.

Books and supplies vary by program.

## **Housing Services**

Clover Park Technical College partners with the Pierce College Center for Global Scholars (CGS) Residence Hall - <https://www.pierce.ctc.edu/ie-cgs> - and CPTC international students are eligible to apply. The CGS Residence Hall is located 2.5mi/4km from CPTC Lakewood Campus. Both CPTC Lakewood Campus and CGS Residence Hall are conveniently located next to the bus stop for easy bus access and commute.

For more information on the residence hall living or the residence hall application process, please contact CPTC Outreach & Entry Services Office at [admissions@cptc.edu](mailto:admissions@cptc.edu).

All eligible CPTC students can get a FREE bus pass from CPTC Department of Student Life.

### **For Additional Information for International Students**

Contact the Outreach & Entry Services Office at +1 253-589-5569

Email: [admissions@cptc.edu](mailto:admissions@cptc.edu)

Mail: Clover Park Technical College

Outreach & Entry Services Office

4500 Steilacoom Blvd SW

Lakewood, WA 98499-4004

USA

# Getting Support

## Advising and Counseling Office

**253-589-5548**

Bldg. 17, Rm. 150, Lakewood Campus

The Advising & Counseling Office provides several resources to support student success such as education planning, career exploration, goal setting, reviewing academic progress, and getting connected to on- and off-campus resources. Students can meet face to face with a counselor by appointment, at designated drop-in times, by phone, or through virtual services. Limited personal counseling services are available for students struggling with a personal issue interfering with a student's ability to be successful in school.

Appointments can be made by calling our main line.

## Disabilities Accommodations

**253-589-5755**

Clover Park Technical College wants to help all students succeed. The college is committed to providing reasonable accommodations to qualified students with disabilities. Reasonable accommodations will be provided to qualified students with disabilities for recruitment, the application process, enrollment, registration, financial aid, course/module work, counseling, programs, and services. A request for accommodations must be made, and documentation of disability is required.

To arrange accommodations, students should contact the Disability Resources for Students Office at 253-589-5767 or [disabilityresources@cptc.edu](mailto:disabilityresources@cptc.edu). Requests for accommodations should be made as far in advance as possible. Lack of advance notice may delay the availability of an accommodation. The complete Clover Park Technical College Policies and Procedures for Reasonable Accommodations for Students with Disabilities under ADA/504 is available in Bldg. 17, Rm. 103.

## Tutoring Center

**253-589-5591 | [www.cptc.edu/lrc/tutoring-center](http://www.cptc.edu/lrc/tutoring-center)**

The Tutoring Center, located in the Learning Resource Center (Bldg. 15), provides free tutoring services for all CPTC students. Tutoring is a drop-in service, no

appointment necessary. CPTC tutors specialize in assisting students with math and English coursework, as well as other common subjects and study skills. Students are encouraged to visit the center early in the quarter to receive the greatest benefit.

See the center's webpage for current hours.

CPTC students also have access to the Western eTutoring Consortium's free online tutoring services 7 days a week from 5:00am-11:00pm, at [www.etutoringonline.org](http://www.etutoringonline.org).

## Adult Basic Education & English as a Second Language (Transitional Studies)

**253-589-5702**

>The Adult Basic Education program offers day, evening, and online classes to help students prepare for college and career success and/or complete a secondary credential. Classes offered include English Language Acquisition (English as a Second Language), High School Completion (HS+) and high school equivalency (GED®) testing preparation, and brush-up math and English. The program offers integrated math, reading, writing, oral communication, digital literacy, and employment skills toward High School Completion credentials, college admission, and/or career changes. The curriculum is based on Career and College Readiness Standards. Students are placed in classes based on their current skill level. Students are served on a first-come, first-served basis. More information is available in the Basic Skills Office in Bldg. 10, Rm. 102, or call 253-589-5702 for more details.

There is a \$25 tuition per quarter for each student enrolled in Basic Skills classes. Tuition waivers are available for eligible students.

## High School Equivalency Testing (GED®)

**253-589-6035 or 253-589-5702**

For the most current information on preparing for high school equivalency testing, please contact the Testing Center at 253-589-6035 (to test) or the Transitional Studies department at 253-589-5702.

In order to sign up for testing, please create an account at

www.ged.com. From the site, students can schedule exams, access study materials, learn about the testing experience, and access additional information. GED® Test scores completed prior to Jan. 1, 2014, are no longer valid.

Testing is computer-based, and the testing software is easy to navigate. Testers between 16-18 years of age need to bring a signed release from their district high school to the testing center before scheduling exams (homeschoolers will need a signed affidavit). Debit or credit card users may pay online. For other forms of payment, please call 253-589-6035 for assistance.

All testers must present valid, government-issued, Photo ID in order to test. If the ID is not issued by Washington State, testers must show proof of residency. Testing times vary; please visit [www.cptc.edu/pearson-vue](http://www.cptc.edu/pearson-vue) for current hours.

#### Test Appointment Lengths:

- Reasoning through Language Arts (155 minutes)
- Social Studies (75 minutes)
- Science (90 minutes)
- Mathematical Reasoning (120 minutes)

## Refund Policy

1. Fees for tests or assessments offered in the Testing Center are non-refundable.
2. For state-funded classes, the tuition and laboratory/supply/computer use fee will be refunded for a payment period upon official withdrawal according to the following schedule:
  - a. 100% Prior to the sixth day of instruction.
  - b. 50% The sixth through 20th day of instruction.
  - c. 0% Twenty-first calendar day through the end of the payment period.
3. Financial aid recipients are subject to the Title IV Return of Funds policy stated in this catalog.
4. For Workforce and Community Education courses and programs:
  - a. 100% Any time class is cancelled by the College.
  - b. 100% If you withdraw 48 hours before the first

class meeting. Certain consumable and pass-through fees (e.g. credit card transaction fees) are not refundable.

- c. 0% If you fail to attend class for any reason without prior notice. Roll-overs to future classes in lieu of refund will not be permitted.
  - d. Students receiving funding through a third party must adhere to the rules of the funding source (e.g., employer, Workforce funding, Labor & Industries)
5. Programs canceled by the college will be refunded at 100 percent of the fees paid but unused as of the cancellation date.
  6. Refunds will not be granted for students withdrawn for disciplinary reasons.
  7. Students called for military active duty will be granted a refund of tuition and fees paid for the current payment period, subject to the rules and regulations of their respective funding sources and payment methods. Presentation of written confirmation (orders) is required.
  8. Students who do not attend the first two class sessions and/or comply with the established attendance policy for the class or program may forfeit the right to continue and may be subject to administrative withdrawal without refund.
  9. Upon official withdrawal, refunds will be made by mail to the student or his or her respective funding agencies.

## Refund Exception

Exceptions to the refund policy must be requested in writing to the Director of Enrollment Services/Registrar before the last day of the quarter in which payment was made. The petition form is available in the Enrollment Services Office in Building 17 or online at [www.cptc.edu/general-petition](http://www.cptc.edu/general-petition).

Eligible requests must have detailed information and supporting documentation attached when the request is submitted.

# Financial Aid

Clover Park Technical College believes that every individual should have the opportunity to achieve their educational goals. The Student Aid & Scholarships Office is located in Building 17 on the Lakewood Campus and provides financial assistance to students who would otherwise not be able to attend school.

Financial assistance may be available to students from various sources in the form of grants, scholarships, loans, and employment. Aid is awarded according to federal, state, and institutional guidelines. No student will be denied aid on the basis of race, color, national origin, sex, sexual orientation, disability, or age.

All prospective students are encouraged to apply for aid. Student Aid & Scholarships staff will discuss opportunities with you and help you with the application process. Eligibility is determined through a careful assessment of the student's financial situation, taking into account their and/or their family's income, assets, debts, number of dependents, and the estimated cost of attending Clover Park Technical College.

## Eligibility

The following programs are NOT eligible for traditional financial aid: Adult Basic Education (ABE), High School Equivalent Exam prep, Quick Start programs, personal enrichment continuing education, Running Start, and High School Completion.

To qualify for federal financial aid, a student must:

- Be admitted to the college in an eligible degree or certificate program;
- Have a high school diploma or High School Equivalency;
- Be a U.S. citizen or an eligible non-citizen;
- Not owe any repayments on previous Title IV assistance and not be in default on any federal student loans;
- Demonstrate a need for financial assistance.

Financial aid is normally awarded based on full-time enrollment (12 credits or more). If students plan to enroll in fewer than 12 credits for any quarter, they must give the Student Aid & Scholarships Office advance written

notification to allow for their award to be revised.

## How to Apply for Financial Aid and Application Deadlines

We strongly recommend that students submit their Free Application for Federal Student Aid (FAFSA) or Washington Application for State Financial Aid (WASFA) to the State Processor to the Federal Processor *THREE MONTHS PRIOR TO THE QUARTER YOU WISH TO START*. Most funds are available on a first-come, first-served basis, so apply early.

To apply for all available federal, state, and institutional financial assistance, students must complete the CPTC financial aid application process. Read the instructions carefully. The application instructions are available at the Student Aid & Scholarships Office and at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid).

1. New students must apply for admission to the college and declare an eligible degree or certificate program.
2. Create a Federal Student Aid ID. You must do this by visiting <https://studentaid.gov/fsa-id/sign-in/landing>. The FSA ID allows you to sign the FAFSA or renewal FAFSA online as well as access other Federal Student Aid secure websites. If you are required to provide your parents' information on the FAFSA, one of your parents will also need to create a Federal Student Aid ID.
3. Complete one of the following and submit it to the Federal Processor on the web: FAFSA or Renewal FAFSA at <https://studentaid.gov>.

After your FAFSA is processed, the Federal Processor will send you a paper Student Aid Report (SAR), an electronic SAR, or a SAR Information Acknowledgement, depending on how you submitted your FAFSA/WAFSA and whether or not you provided a valid email address on your FAFSA/WASFA. If you do not receive your SAR within two weeks of submitting your application, call the Federal Processor at 1-800-4FED-AID to check on the status of your application.

Remember you can always check the status of your file on the Student Service Center, Financial aid tab in your CTC link profile.

4. Both continuing and new students must submit all



additional required documents by the deadline.

After the Federal Processor and State Processor send the Student Aid & Scholarships Office a copy of your processed FAFSA data, we will post information in CTC link (To Do's) explaining what additional documents we need to complete your file and/or what actions you must take. Submit all additional required documents and take care of all required actions as instructed by the following deadline dates to ensure your application is reviewed prior to the start of the quarter you begin classes. If all required documentation is not submitted in a timely manner your financial aid may be delayed, and you may be required to pay your tuition, fees, books, and supplies until your file is reviewed.

5. Complete Direct Stafford Loan Master Promissory Note and required counseling.

### **First-Time Borrower**

If you are new to the college, or have not received a Federal Direct Stafford Loan from Clover Park Technical College in the last year, you are required to complete Entrance Counseling and a Master Promissory Note (MPN). To complete these steps, go to [www.studentaid.gov](http://www.studentaid.gov). The school will be notified electronically within three to five business days from the time of completion. You can check your student portal to see when Clover Park has received notification that this requirement has been completed.

Please Note: Students who are first-time borrowers at CPTC must serve a 30-day waiting period and will not receive the first disbursement of their loans until approximately the 35th day of the quarter. This applies only to the first quarter of attendance that student receives loan funds.

### **Returning Borrower**

Continuing students must complete Financial Awareness Counseling every academic year by visiting <https://studentaid.gov>. The school will be notified electronically within three to five business days from the time of completion. You can check your student portal to see when Clover Park has received notification that this requirement has been completed. If you previously received a direct loan for a prior year, you do not need to complete an entrance counseling and Master Promissory Note. The Department of Education allows a borrower to receive additional direct loans on a single Master Promissory Note for up to 10 years.

### **Federal Direct Parent Plus Loans**

To read more information about the Stafford Loans, please visit [www.cptc.edu/financial-aid/stafford](http://www.cptc.edu/financial-aid/stafford). Parent Plus Loans are federal loans to help you pay for the cost of your child's education expenses. Parent Plus Loans are only available for Dependent Students. To apply for a Federal Parent Plus Loan, go to <https://studentaid.gov> and complete a Parent Plus Application and Parent Plus Master Promissory Note. The school will be notified electronically within three to five business days from the time of completion.

Click "read more" under the "Apply for Federal Direct Stafford Loan" link.

Students who are taking nursing (LPN or RN) academic prerequisites do not qualify for grant assistance. They qualify for student loans only, and only for a period of 12 consecutive months. (Nursing Assistant program is not eligible for federal student loans.)

Student Aid & Scholarships Office:

4500 Steilacoom Blvd SW

Lakewood WA 98499-4004

Building 17, Room 130

253-589-5660, Fax: 253-589-5618

**Federal School code: 015984**

## **Cost of Attending College**

The 2023-2024 tuition rates are available at [www.cptc.edu/tuition](http://www.cptc.edu/tuition). This page also includes fees and associated costs as they are updated for each program.

## **Determining Financial Need**

The amount of assistance students receive is based on the student's demonstrated need.

Cost of attending college – Expected family contribution = Need

Financial need is defined as the difference between educational expenses (tuition, fees, books, tools, supplies, room and board, personal, and transportation) and the amount the student and their family can afford to pay as determined by the information on the Free Application for Federal Student Aid (FAFSA) or Washington Application for State Financial Aid (WASFA).

## Yearly FAFSA/WASFA Timelines

Students must apply for financial aid once every academic year. For financial aid purposes, the year starts July 1 and ends June 30 (Summer Quarter through Spring Quarter). The FAFSA or WASFA application will be available starting October 1 for the following academic year. If a student starts classes in Winter or Spring Quarters, two FAFSAs or WASFAs must be completed: one for the current school year and one for the upcoming school year.

## Description of Aid Programs

### Federal and State Grants

CPTC offers both federal grants (Pell Grant, Supplemental, and Educational Opportunity Grant) and state grants (Washington State Need Grant). Grants are considered a form of gift aid because they do not have to be repaid, provided students attend their classes, do not reduce their enrollment on or before the 10th business day of the quarter, do not make a 100-percent withdrawal, do not stop attending their classes, and do not complete zero credits for a quarter.

### Work-Study

Federal and state work-study programs offer students the opportunity to gain valuable work experience while earning money for college. Both on-campus and off-campus positions are available.

Students receive their work-study funds in the form of a paycheck from the employer based on their hourly wage and the number of hours worked in any given pay period. Because work-study funds must be earned, they are not available at the beginning of the quarter to help students pay their tuition and fees or purchase their books.

### Student Loans

**Federal Direct Subsidized Stafford Loans** are need-based loans. The term “subsidized” means the federal government pays interest on the loan on the student’s behalf until the student enters repayment.

#### Maximum Eligibility Period to Receive Direct Subsidized Loans

There is a limit on the maximum period of time (measured in academic years) you can receive Direct Subsidized Loans. In general, you may not receive Direct Subsidized Loans for more than 150 percent of the published length of

your program. This is called your “maximum eligibility period.” You can usually find the published length of any program of study in the catalog.

*For example, if you are enrolled in a 4-year bachelor’s degree program, the maximum period for which you can receive Direct Subsidized Loans is 6 years (150% of 4 years = 6 years). If you are enrolled in a 2-year associate degree program, the maximum period for which you can receive Direct Subsidized Loans is 3 years (150% of 2 years = 3 years).*

Your maximum eligibility period is based on the published length of your current program. This means that your maximum eligibility period can change if you change programs. Also, if you receive Direct Subsidized Loans for one program and then change to another program, the Direct Subsidized Loans you received for the earlier program will generally count against your new maximum eligibility period.

**Federal Direct Unsubsidized Stafford Loans** are non-need based loans. The term “unsubsidized” means the federal government does not pay interest on the loan until the student enters repayment; students are responsible for paying all accrued interest. Interest can be paid while the student is in school, or it can be deferred until the student enters repayment. If deferred, the unpaid interest that accrues is added to the loan amount the student borrowed, a process known as capitalization.

## Scholarships

Many businesses, services, and professional organizations, as well as individuals in the community, contribute funds to be used as grants (awards based on need) or as scholarships (awards based on merit, need, or other criteria). Applications are accepted at various times throughout the year. Eligibility criteria and application procedures are posted on the Scholarship Board located outside the Student Aid & Scholarships Office in Building 17 and at [www.thewashboard.org](http://www.thewashboard.org) and [www.fastweb.com](http://www.fastweb.com).

Scholarships are also available from the Clover Park Technical College Foundation. For more information, visit the CPTC Foundation website at <https://www.cptc.edu/scholarships>.

## Agency Funding

Persons who qualify for assistance from the Division of Vocational Rehabilitation of the State of Washington or neighboring states, the Department of Labor and Industries, the Washington State Department of Social and

Health Services, WorkSource, or the Employment Security Department may attend programs at Clover Park Technical College.

Agencies or students must provide the College with documentation for funding before classes begin.

The funding coordinator is available to answer your questions by appointment, at 253-589-5663 or [agencyfunding@cptc.edu](mailto:agencyfunding@cptc.edu).

## Opportunity Grant

**253-589-4311 | [www.cptc.edu/opportunity-grant](http://www.cptc.edu/opportunity-grant)**

Clover Park Technical College's Opportunity Grant may assist eligible students with educational expenses such as tuition, fees and books, and wrap-around support services for a maximum of 45 credits over a three-year period. Awards are based on student need and grant availability and, thus, may vary from quarter to quarter.

Eligible Opportunity Grant programs:

- Accounting
- Aviation Maintenance Technician
- Avionics Technician
- Central Services Sterile Processing
- Computer Programming
- Dental Assistant
- Early Care & Education
- Electric Low Voltage Fire/Security
- Environmental Sciences & Technology
- Esthetics Sciences
- Health Unit Coordinator
- Heating & Air Conditioning/Refrigeration Service Technician
- I-BEST Programs
- Mechatronics
- Medical Assistant
- Medical Histology Technician
- Medical Laboratory Technician

- Network Operations & System Security
- Nondestructive Testing
- Nursing Assistant
- Pharmacy Technician
- Practical Nurse (LPN)
- Surgical Technology
- Welding Technology

Eligibility Criteria:

- Complete the Free Application for Federal Student Aid (FAFSA) OR the Washington Application for State Financial Aid (WASFA); demonstrate unmet financial need.
- Be a Washington State resident.
- Be admitted into one of the eligible OG program pathways.
- Make satisfactory academic progress and maintain a cumulative 2.0 grade point average. (Students must not be in financial aid suspension or in student loan default.)
- Meet family low-income guidelines.

For more information, please call or visit the Workforce Development Eligibility Office during hours of operation.

## Basic Food Employment and Training (BFET)

**253-589-4311 | [www.cptc.edu/BFET](http://www.cptc.edu/BFET)**

Basic Food Employment and Training (BFET) provides employment training, funding, and services to individuals who receive federal Supplemental Nutrition Assistance Program (SNAP) benefits or who are eligible to apply for SNAP. Clover Park BFET participants may receive:

- Complete the Free Application for Federal Student Aid (FAFSA) OR the Washington Application for State Financial Aid (WASFA); demonstrate unmet financial aid need.
- Financial assistance may include tuition, books, and required educational expenses. Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status,

and grant fund availability.

- Ability to apply for childcare subsidies through DSHS, connection with other college and community resources, and ongoing mentoring and support.
- Most CPTC programs are eligible, including High School Completion, Running Start, Continuing Education classes, and Adult Basic Education programs.
- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)

Individuals who are WorkFirst participants are not eligible for BFET.

For more information, please call or visit the Workforce Development Eligibility Office. See webpage for office location and hours.

## WorkFirst

**253-589-4311 | [www.cptc.edu/workfirst](http://www.cptc.edu/workfirst)**

The WorkFirst Program serves families receiving Temporary Assistance for Needy Families (TANF) and are required participants through the Department of Social and Health Services (DSHS); helping them start, continue, or finish their education and training, leading to employment and self-sufficiency.

- Complete the Free Application for Federal Student Aid (FAFSA) OR the Washington Application for State Financial Aid (WASFA); demonstrate unmet financial aid need.
- WorkFirst may assist with tuition and books for most CPTC programs including High School Completion, Running Start, Continuing Education, and Adult Basic Education.
- Students who qualify for WorkFirst may also be eligible for WorkFirst Work Study.
- WorkFirst students may also be eligible to receive WorkFirst Support Services if they are open on TANF, required to participate through DSHS, and active on our Workforce Development caseload.
- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)

For more information, please call or visit the Workforce

Development Eligibility Office. See webpage for office location and hours.

## Worker Retraining

**253-589-4311 | [www.cptc.edu/worker-retraining](http://www.cptc.edu/worker-retraining)**

The Washington Worker Retraining Program provides training and funding for unemployed workers who want to upgrade their skills or train for a new career. Worker Retraining support may be available if you meet any of the following:

- Facing a layoff and eligible to collect unemployment benefits.
- Currently collecting unemployment benefits.
- Exhausted unemployment benefits within the past 48 months.
- Displaced homemaker within the past 24 months.
- Self-employed and now unemployed with the past 24 months.
- Honorably discharged veteran within the past 48 months.
- Stop-gap employment.
- Active-duty military with an official order of separation.

Eligibility Criteria:

- Complete the Free Application for Federal Student Aid (FAFSA) OR the Washington Application for State Financial Aid (WASFA).
- Worker Retraining funds may be applied to tuition, books, transportation, and childcare assistance. (Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability.)
- WRT funding is typically awarded for one quarter. Students should have a funding plan for subsequent quarters. Additional funding may be available on a case-by-case basis.
- Allowable programs include all CPTC's High Wage/High Demand professional/technical programs, and programs funded by Worker Retraining.
- Students who have earned Bachelor degrees will be

reviewed on a case-by-case basis.

- Maintain satisfactory academic progress according to CPTC's financial aid policies. (Students must not be in financial aid suspension or in student loan default.)

For more information, please call or visit the Workforce Development Eligibility Office. See webpage for office location and hours.

## Early Achievers Grant (EAG)

253-589-5574 | [www.cptc.edu/eag](http://www.cptc.edu/eag)

Early Achievers Grant (EAG) is a student financial aid resource that allows funding priority to students who are employed by Early Achievers facilities. The grant's goal is to help employed childcare providers and early learning educators complete stackable certificates that build into an associate degree in Early Childhood Education (ECE). Clover Park EAG recipients may receive:

- Financial assistance for tuition and books. (Financial assistance is determined on a case-by-case basis and may be limited by grant requirements, financial aid status, and grant fund availability).
- Ability to receive one-on-one academic support through Workforce Development and the ECE faculty instructor.

The CPTC Early Childhood Education stackable state certifications and degree are eligible for EAG funding.

For more information, please call 253-589-5574 or email [EarlyAchievers@cptc.edu](mailto:EarlyAchievers@cptc.edu).

## Financial Aid Student Portal

Students must use the ctcLink Financial aid tile to view the status of their financial aid file and award amounts.

## Rights and Responsibilities

As a financial aid recipient, students have the following rights:

1. Access to accurate and timely information on financial aid deadlines and procedures.
2. Access to personal financial aid records and information as defined by the Buckley Amendment of 1974.
3. The choice of accepting all or only part of the

assistance offered.

4. Access to a review of the award package should the student's financial situation change. Included in this right is the opportunity to appeal.

Along with these rights, students have the following responsibilities:

1. To provide accurate information to be used in the aid process. Misrepresenting information is a violation of the law and could result in indictment under the U.S. Criminal Code.
2. To inform the Student Aid & Scholarships Office of any significant changes to a student's financial situation (scholarships, gifts, earnings, funding, etc.) in excess of \$200 that were not listed in the application or any other change in circumstances, such as a change in student status or marital status, that may influence the award. Failure to report these changes can result in federal legal action to recover aid funds.
3. To understand the loan obligation. With a loan as part of the student's package, future earnings are pledged to pay present school costs. Loan conditions should be read carefully; ask questions.
4. To maintain satisfactory academic progress toward the completion of the degree/certificate program.
5. To repay any financial aid received when students were not eligible.
6. To continue receiving financial aid, students must reapply each academic year.

## Satisfactory Academic Progress

Federal and state financial aid regulations require schools to set minimum standards for satisfactory academic progress and to hold students accountable for meeting the standards. Satisfactory Academic Progress is checked prior to awarding aid, even if students did not receive financial aid in past quarters. It is also checked at the end of every quarter aid is received.

The Satisfactory Academic Progress policy includes the following:

1. Cumulative pace of progression towards degree or certificate must be at least 66.67 percent.
2. Cumulative Grade Point Average requirement of 2.0

or greater.

### 3. Credit limit requirement.

Copies of the complete Satisfactory Academic Progress policy are available on the Student Aid & Scholarships Office website at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid) as well as at the Student Aid & Scholarships Office front counter.

## Withdrawal and Repayment Policies

Students who withdraw from all classes, stop attending all classes, or a combination of both before completing 61 percent of the quarter (measured in calendar days), or students who complete zero credits, may be required to repay a portion of the financial aid they received for that quarter. This applies to grant funds as well as student loans. Repayments are computed in accordance with federal and state regulations. Repayments can be owed to the college, the U.S. Department of Education, and/or the Washington Student Achievement Council. Students who owe a repayment are notified in writing. The complete repayment policy can be found on the Student Aid & Scholarships Office website at [www.cptc.edu/financial-aid](http://www.cptc.edu/financial-aid).

The first days that students can drop to zero (withdraw from all classes, stop attending all classes, or a combination of both) without owing a repayment as a result are:

<b>Summer 2023</b>	<b>August 9, 2023</b>
<b>Fall 2023</b>	<b>November 13, 2023</b>
<b>Winter 2024</b>	<b>February 20, 2024</b>
<b>Spring 2024</b>	<b>May 16, 2024</b>

# Campus Life and Services

## Student Life

**253-589-5780 | [www.cptc.edu/student-life](http://www.cptc.edu/student-life)**

We develop and administer programs and services that engage students from their first days on campus (new student orientation) to degree completion (graduation).

Supported by services and activities fees, collected from every student's tuition, students and department staff are committed to serving students by building a healthy, inclusive and vibrant campus culture that engages students throughout their academic journey.

## Food Security and Transportation Initiatives

### Transportation: ORCA Bus Pass

**[www.cptc.edu/buspass](http://www.cptc.edu/buspass)**

Since 2014, the ASG has been developing initiatives aimed at supporting student food security and ensuring students have access to transportation. Currently enrolled students can ride the Pierce Transit bus system within the county free of charge with a CPTC ORCA Card.

### Food Security

**[www.cptc.edu/food-pantry](http://www.cptc.edu/food-pantry)**

- The Department of Student Life operates a Food Pantry as an initiative of the SLSC. Currently registered CPTC students can access this resource one time each month.
- Additionally, the Personal Care Pantry is also available to currently enrolled CPTC students and can also be accessed when utilizing the CPTC Food Pantry.
- Through a partnership with Nourish Piece County, a mobile food bank is on the Lakewood Campus every Wednesday from 1 - 3 pm. CPTC students, staff, faculty, and Lakewood Community members can access this service once a week.

## Student Leadership and Service Center

**253-589-5780 | [www.cptc.edu/student-life/slsc](http://www.cptc.edu/student-life/slsc)**

This on-campus one-stop shop is for all things campus life, where students and community members alike are greeted by friendly and trained student staff. These staff members help patrons discover what's happening on campus, provide maps, and administer SLSC services.

More than just an information area, the SLSC also provides students with a comfortable space to take a break from studies, meet with friends, form a study group, or host a club meeting.

## Fitness Center

**253-589-5780 | [www.cptc.edu/fitnesscenter](http://www.cptc.edu/fitnesscenter)**

The Fitness Center provides currently enrolled students access, free of charge, to a variety of cardio, and weightlifting equipment, during the academic quarter.

## Male Engagement Center (The MEC)

**253-589-5634 | [www.cptc.edu/mec](http://www.cptc.edu/mec)**

The Male Engagement Center (MEC), geared toward African American males, provides its members with targeted academic and non-academic supports designed to improve their skill sets, foster a sense of trust and belonging, and build resolve as they pursue a certification or program degree at Clover Park Technical College and beyond.

The MEC uses an evidence-based, data-driven, high-touch approach to design high-impact practices and student-centered support programming for our Black male students' unique needs as we foster a stronger sense of trust and belonging from their first days on campus, through program completion, and into career placement. The center's inclusive excellence framework is divided into five tier categories:

1. Peer Mentoring and Coaching
2. MEC Supports and Stewardship
3. Culturally Relevant Programming
4. Leadership Development through our Leadership &

Legacy U.

#### 5. Industry and Community Networking

The MEC is located in Building 15.

## MOSAIC (Student Access, Inclusion, and Community) Center

**253-589-5780 | [www.cptc.edu/multicultural](http://www.cptc.edu/multicultural)**

The MOSAIC (Student Access, Inclusion, and Community) Center is an inclusive, welcoming space where students of diverse, racial, ethnic and gender backgrounds can gather and connect with other students to build affinity. The Center is also the space where white students can connect with the students to nurture allyship. The Center serves as a diversity resource hub and has the following amenities:

- Student Lounge
- Computers
- Scholarship info & application assistance
- Campus and community resource referrals and support
- >Diversity library and resources
- Commencement achievement program>

The MOSAIC Center is located in the Student Center (Building 23).

## Veterans Resource Center (VRC)

**253-589-5966 | [www.cptc.edu/veterans/vrc](http://www.cptc.edu/veterans/vrc)**

The CPTC Veterans Resource Center is a place for veterans to connect with other veterans. In addition, the center provides services specifically designed for veterans. It is not just an office, but rather a place where veterans can find and build their community within the college.

In addition to the CPTC Vet Corp Veterans Navigator, Peer Navigators are available to assist current and prospective military-connected students with accessing benefits as well as providing referrals to a number of campus and community resources with the goal of helping veterans balance their academic and personal demands.

The VRC is located in Building 16.

## Student Identification Cards

**253-589-5780 | [www.cptc.edu/student-id](http://www.cptc.edu/student-id)**

Student Identification Cards are available in Building 23 at the Student Leadership & Service Center during the regular scheduled hours of the center.

The first ID is complimentary. Replacement ID's cost \$5 and should be paid at the cashier's window in Building 17. Picture ID and CPTC Student ID number are required to be issued a Student Identification Card.

## Bookstore

**253-589-5614 | [www.cptc.edu/bookstore](http://www.cptc.edu/bookstore)**

The bookstore carries textbooks, school supplies, course-required tools and kits, medical supplies and scrubs, auto and welding supplies, chef supplies, calculators, reference materials, and assorted imprinted items. The bookstore also carries snack, beverage, and lunch items. The bookstore can order most books and supplies not available in the store. The bookstore gladly offers refunds and exchanges on textbooks (with receipt and in the condition sold) bought and returned within the first week of the current quarter

### Rentals

Rentals are one of several cost-saving options offered to students. Customers can rent selected textbooks in store or online and save up to 80 percent off the new book selling price. Students simply rent the book through the bookstore website or in the bookstore and then check the book in at the end of the term. Visit the bookstore website at [www.cptc.edu/bookstore](http://www.cptc.edu/bookstore) for details.

### Used Book Buy Back

A Book Buy Back service is offered for students who do not wish to keep their textbooks. The value of a book is determined by the demand for that title nationally. Students can receive up to half the current value. The bookstore does buyback on a daily basis, but the best time is during the last 2-3 weeks of each quarter. The prices paid back to students and the selected titles are based on a number of criteria. See the bookstore for details.

The bookstore is located in Building 23



## Associated Student Government

### Student Government

This student-led board is an advocate of the student voice and a partner with other governing units. The Student Government oversees the administration of the Associated Student Government (ASG). Student-led business meetings, which are open to the public, are held on a regular basis while CPTC is in session during the fall, winter, and spring quarters.

To learn more about student governance at CPTC, please visit [www.cptc.edu/asg](http://www.cptc.edu/asg).

### Engagement Opportunities

The ASG promotes and coordinates a well-balanced program of student-initiated activities that enhance health and wellness, cultural, social and recreational needs of the Associated Students outside the classroom aimed at fostering connections and community.

### Student Organizations

The ASG coordinates the management of student clubs and organizations, which operate specifically to promote individual programs with respective industries, provide opportunities to get involved, and experience both personal and professional growth.

To learn about upcoming events and student organizations, please visit [www.cptc.edu/student-life](http://www.cptc.edu/student-life).

## Food Services

The Clover Park Technical College Culinary Arts students offer lunch in the Rainier Room in Building 31, and for the Bon Sucre Bistro in Building 23. Hours and menu change throughout the academic year. Visit [www.cptc.edu/culinary](http://www.cptc.edu/culinary) for information.

Food is also available for purchase at vending machines throughout campus and the bookstore in Building 23.

## Parking and Transportation

**253-589-5557**

Pierce County transit buses make regular stops at CPTC. To see specific routes, visit [www.piercetransit.org](http://www.piercetransit.org). All CPTC students are eligible to receive a CPTC ORCA Card for each quarter they are enrolled at the college. For more information, visit the Student Leadership and Service Center in Building 23 or visit [www.cptc.edu/buspass](http://www.cptc.edu/buspass).

White-striped areas are designated for student parking. Yellow-striped areas are restricted to the following: disabled, authorized staff, and visitors. The campus speed limit is 10 miles per hour, unless otherwise posted. Vehicles improperly parked on campus are subject to a fine for each offense and/or will be towed at the owner's expense. Students are also subject to a fine for each offense for parking in unauthorized areas, blocking or obstructing traffic, and parking in fire lanes or tow-away zones. Parking in a designated handicapped space without a state-issued handicapped parking permit carries a campus fine or a higher fine if cited by the Lakewood Police Department.

Students who violate driving or parking rules may be required to leave their vehicles off campus. Clover Park Technical College is not responsible for damage to or loss of vehicles parked on campus.

## Library and Computer Labs

**253-589-5544 | [www.cptc.edu/library](http://www.cptc.edu/library)**

The CPTC Library and Computer Lab are located in the Learning Resource Center (LRC) in Building 15. All currently enrolled students are eligible to use the Library and Computer Lab spaces and services for college-related activities.

The Library provides access to a wide variety of materials, such as electronic databases for journal articles, books, eBooks, multimedia equipment, and other resources that support teaching and learning at CPTC. The Library also has several individual and group study areas to meet student needs, including tables, booths, and group study rooms. Faculty librarians are available for research help and for library skills and information literacy instruction. And for after-hours convenience, there is an outside book return on the east end of Building 15.

Computer Lab equipment includes PCs and Macs with a variety of software and hardware to help students with assignments and to accommodate students with special needs. Printing, copying, and scanning services are available to current students for free. The LRC also provides faxing services free of charge.

## Security

**253-589-5682 (emergency) or 253-589-5557 (non-emergency)**

The CPTC Security Department places students and staff at the center of all we do. We are committed to providing a safe and secure environment through the following

services: campus patrol, parking/traffic enforcement, emergency response, incident investigation, lost and found management, basic first aid, escort services to or from your vehicle, battery boosts, building access, and the assignment of keys and alarm codes. Our officers are non-commissioned, and the Lakewood Police Department has jurisdiction on our Main Campus in Lakewood, while the Pierce County Sheriff's Office has jurisdiction at the South Hill Campus.

Visit [www.cptc.edu/security](http://www.cptc.edu/security) for information about:

- Sex offender notification
- Clery Act
- Campus crime statistics

## Early Care and Education

### Affiliated Child Care Center Program

**Contact 253-589-4516 for more information.**

Early Care and Education offers on-site instruction and customized courses focusing on Early Childhood Education (ECE) to affiliated child care centers.

Staff at child care centers are eligible to combine on-site training, attendance at on-campus classes, workshops, and courses to earn college credit or meet STARS continuing education requirements. This includes the opportunity to earn onsite Washington State ECE Stackable certificates meeting the education requirements to start your career in the ECE profession. These services are currently provided to more than 50 child care centers.

Clover Park Technical College is authorized by the Council for Early Childhood Professional Recognition to provide instruction for the Child Development Associate (CDA) Professional Preparatory Program and Direct Assessment Program. Students interested in the process for earning a CDA from the National Credentialing Program can call the council at 1-800-424-4310.

### On-Campus Child Care

**253-589-5531 or 253-589-5721**

The Hayes Child Development Center at Clover Park Technical College's Lakewood Campus provides services for children ranging in age from four weeks to five years. We are here to support CPTC students and staff needing child care. We accept DSHS, Military Fee Assistance, and cash payments.

We are proud to be a National Association for the Education of Young Children (NAEYC)-accredited facility. NAEYC-accredited centers are high-quality programs that provide a safe and nurturing environment while promoting the development of young children. NAEYC-accredited programs show their quality by meeting the 10 NAEYC Early Childhood Program Standards, which are based on the latest research on education and development of young children.

In addition to our national accreditation, we've been rated by the Washington State Quality Rating System Early Achievers as a level 4. Level 4 showcases the high-quality childcare services Hayes Child Development Center offers children and families in our college community.

If you have questions about Hayes Child Development Center, please call 253-589-5531 or email [hayes@cptc.edu](mailto:hayes@cptc.edu).

### ECEAP Preschool

**Family Support 253-589-5531**

CPTC offers a full-day Early Childhood Education and Assistance Program (ECEAP) program to eligible families with children three and four years old.

The four focus areas of this state-funded program are early child education, health, family involvement, and family support services.

Families are involved in adult education and program planning/operating activities. Getting involved with the policy council is a great way to gain work experience as well as learn to advocate for decisions that make the program successful. These early learning programs seek to provide comprehensive developmental services for children from low-income families.

Registration information is available at [www.cptc.edu/childcare](http://www.cptc.edu/childcare).

## Career & Community Services

**253-589-5389 | [www.cptc.edu/ccs](http://www.cptc.edu/ccs)**

We support students by building bridges into school and from school into the workforce and meaningful careers.

We assist with community resource navigation; career planning; short-term workforce education; employer connections; classroom career services presentations; and professional development opportunities for staff.

# Program Descriptions

**Prerequisite(s):** Some programs have unique prerequisites. If prerequisites are required, they are listed with each program in the pages that follow and are in addition to college entrance requirements.

A core of academic classes is an integral part of all CPTC preparatory programs. Students may waive classes below the 100 level by meeting the Prerequisite Accuplacer score or equivalent using multiple measures for placement. Course descriptions are in the next section. Listed for each program are college quarter credit hour equivalents.

Program completion is dependent on satisfactory progress and successful achievement of all course requirements and student outcomes with an overall GPA of 2.0 or greater. It should be recognized that the number of quarters and hours identified for each program on the following pages is approximate; some students may need additional quarters to meet graduation requirements.

## Certificates at CPTC

Program certificates are a great way to get started in a new industry or to advance your skill levels and stay current with industry standards. Most of our programs offer short-term certificates, many of which can be completed in one year or less.

## Degrees at CPTC

The Bachelor of Applied Science (BAS) degree is awarded for completion of at least 90 credits of appropriate 300- and 400-level coursework. An applied associate degree, AAS-T, Direct Transfer Associate degree or equivalent with a required distribution of academic course work is a prerequisite for program admission. A detailed list of program admission requirements can be found online.

The Associate of Applied Technology (AAT) degree is awarded to students who complete programs that are 90 credits or more in length and include a core of 15 college-level academic credits. The bulk of the credits are in specific career/technical fields. The required general education courses in communication, quantitative reasoning and social sciences are designed to prepare students for work.

The Associate in Applied Science - T (AAS-T) degree is also a workforce degree with a core of general education courses. The difference is that the AAS-T degree requires a minimum of 20 credits of general education courses

commonly accepted in transfer, including a minimum of five credits in English composition (ENGL& 101), five credits in quantitative reasoning, five credits in social science, and five additional credits in social science, humanities, or natural science.

The Associate in Pre-Nursing Direct Transfer Agreement Major Related Program (DTA/MRP) degree is awarded by Clover Park Technical College to students who have completed specified curriculum with the intent of transferring to one of Washington's four-year institutions.

DTA/MRP degrees prepare students with general education requirements necessary to pursue further study. They do not alter the admission criteria established by the baccalaureate institution, nor do they guarantee admission to the institution. Students should contact an advisor at the potential transfer institution regarding their interests and specific course choices.

If specific licensure or other eligibility requirements are necessary for employment in a career field offered by Clover Park Technical College, the program description provided in this section of the catalog will identify those requirements. Unique requirements for employment and advancement within the profession or occupation are also described. Certification obtained through the completion of all program requirements does not guarantee job attainment or reciprocity of credentials in another state or country.

## Accounting

### Accounting Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for careers in accounting with starting positions such as a junior-level accountant, entry-level accounting supervisor, full-charge bookkeeper, fiscal technician, accounting assistant, or other entry-level accounting clerks. Positions may also include specialty areas such as payroll, income taxes, and QuickBooks applications.

Technical course curriculum is based on current industry standards. Course delivery varies between live, hybrid and online methods. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone

project, diversity, and computer literacy requirements.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All courses must be completed with a minimum “C” grade to graduate.

**Admission Dates**

Recommended fall and spring quarters or by instructor’s permission. Students with prior learning or experience should contact the instructor prior to enrolling for individual start dates, class schedule and options.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of MAT 092 and ENG 091 or equivalent or instructor’s permission. Working knowledge of computer literacy to include file management, cloud storage, browsers, and search engines recommended.

**Program Course List**

ACTG 110	Bookkeeping I	4
ACTG 115	Bookkeeping II	4
ACTG 135	Accounting Spreadsheets I	5
ACTG 137	Accounting Digital Office	3
ACTG 145	Quickbooks	5
ACTG 160	Payroll & Business Taxes	5
ACCT& 201	Principles of Accounting I	5
BUS& 201	Business Law	5
ACCT& 202	Principles of Accounting II	5
ACCT& 203	Principles of Accounting III	5
ACTG 211	Principles of Accounting I Lab	2
ACTG 212	Principles of Accounting II Lab	3
ACTG 224	Fundamentals of Governmental/Nonprofit Accounting	5
ACTG 260	Business Office I	5
ACTG 262CAP	Business Office II	5
ACTG 291	Individual Income Tax Accounting	5
ACTG 294	Individual Income Tax Accounting Lab	3
	<b>Subtotal: 74</b>	

*ACTG 110, ACTG 115 and ACTG 120: Courses are articulated with high schools for dual credit.*

*ACCT&201, ACCT&202, ACCT&203 and*

***BUS&201: courses are articulated with WA State common course numbering***

AAT Degree Requirements	
Technical Course Requirements	74
AAT General Education Requirements	18
	<b>Subtotal: 92</b>

AAT Degree General Education Requirements: See list below

AAS-T Degree Requirements	
Technical Course Requirements	74
AAS-T Degree General Education Requirements	23
	<b>Subtotal: 97</b>

AAS-T Degree General Education Requirements: See list below

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science - Transfer (AAS-T). The different requirements for each degree are listed below.

AAT Degree General Education Requirements (18 credits)		
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
MAT 103	Business Mathematics Or	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	<b>Subtotal: 18</b>	

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

**Subtotal: 23**

**5 credits in communication**

ENGL& 101	English Composition I	5
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**Subtotal: 5**

**5 credits in quantitative reasoning:**

MATH& 107	Math in Society	5
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MATH& 141	Precalculus I	5
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MATH& 142	Precalculus II, Functional Trigonometry	5
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MATH& 146	Introduction to Statistics	5
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MATH& 151	Calculus I	5
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**Subtotal: 5**

**5 credits in a social science that meets the diversity requirement**

PSYC& 100DIV	General Psychology	5
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SOC& 101DIV	Introduction to Sociology	5
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**Subtotal: 5**

**5 credits in social science, humanities, or science****5 credits in social science, humanities, or science**

Choose one from the following:

ART& 100	Art Appreciation	5
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ASL& 121	American Sign Language I	5
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ASL& 122	American Sign Language II	5
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BIOL& 241	Human A & P I	5
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BIOL& 242	Human A & P II	5
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BIOL& 260	Microbiology	5
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CHEM& 110	Chemical Concepts w/Lab	5
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CHEM& 121	Intro to Chemistry	5
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CHEM& 131	Introduction to	5
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Organic/Biochemistry

CMST& 220	Public Speaking	5
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GEOL& 110	Environmental Geology with	5
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Lab

HIST& 146	US History I	5
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HIST& 147	US History II	5
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HIST& 148	US History III	5
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HUM& 101	Introduction to Humanities	5
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MUSC& 105	Music Appreciation	5
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PHYS& 114	General Physics I with Lab	5
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POLS& 202	United States Government	5
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PSYC&	General Psychology	5
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100DIV

PSYC& 200	Lifespan Psychology	5
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PSYC& 220	Psychological Disorders	5
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SOC& 101DIV	Introduction to Sociology	5
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**Subtotal: 5**

3 credits in College Success:

COLL 102	College Success for All	3
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**Subtotal: 3**

**Bookkeeping Clerk Certificate**

Prepares students for employment as accounts receivable, accounts payable, payroll clerks, or other bookkeeping clerk positions. Introduces bookkeeping and accounting theory complemented with Microsoft Office applications and automated accounting software. Enhances the skills of an office clerk. Technical course curriculum is based on current industry standards. Course delivery varies between live, hybrid and online methods.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All courses must be completed with a minimum “C” grade to graduate.

**Admission Dates**

Recommended fall and spring quarters or by instructor’s permission. Students with prior learning or experience should contact the instructor prior to enrolling for individual start dates.

**Completion Requirements****Prerequisite(s)**

Successful completion of MAT 092 and ENG 091 or equivalent or instructor’s permission.

**Program Course List**

ACTG 110	Bookkeeping I	4
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ACTG 115	Bookkeeping II	4
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ACTG 120	Electronic Business Math	2
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ACTG 135	Accounting Spreadsheets I	5
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ACTG 137	Accounting Digital Office	3
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ACTG 145	Quickbooks	5
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ACTG 160	Payroll & Business Taxes	5
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ACCT& 201	Principles of Accounting I	5
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ACTG 211	Principles of Accounting I	2
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Lab

COLL 102	College Success for All	3
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**Subtotal: 38**

*ACTG 110, ACTG 115, and ACTG 120: Courses are articulated with high schools for dual credit.*

*ACTG141 & ACTG143 replaced with ACTG145.*

## Architectural Engineering Design

Architectural Engineering Design  
Associate of Applied Technology Degree  
/ Associate in Applied Science – T  
Degree

Prepares students for employment in the field of architectural design or a related technical field, such as drawing for product manufacturers, contractors, engineering or design firms. Prior graduates have entered engineering technician positions in computer-aided drafting and design (CADD); project management; specification writing; cost estimating; residential design, site planning, and developing; customer sales and service; and performing structural calculations and computations for engineering of wood trusses and joists. Students participate in realistic training activities as a part of their educational experience.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

### Prerequisite(s)

*Computer skills are highly recommended prior to starting ARC courses.*

### Program Course List

ARC 120	Residential Drafting & Design I	4
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ARC 124	Residential Drafting & Design II	5
ARC 126	Residential Drafting & Design III	5
ARC 146	Detailing and Light Construction	4
ARC 150	Construction Materials Research	4
ARC 171	Drafting Technologies I	5
ARC 175	Civil Engineering	4
ARC 183CL	Introduction to CAD Drafting	4
ARC 192	Engineering Mechanics of Materials	4
ARC 219	Residential Drafting & Design IV	4
ARC 223	Design Project I	5
ARC 225CAP	Design Project II	5
ARC 231	Cost Estimating I	3
ARC 255	Employment Research	1
ARC 262	Intro to 3D Modeling	3
ARC 282	Intro to Building Information Modeling	5
ARC 286	Advanced Building Information Modeling	5
ARC 293	Engineering Statics Plus 5 credits from the list of electives below	5 5
Electives:		
ARC 227	Special Intern Project	5
ARC 229	Special Design Project	5
ARC 288CL	Applied CADD	5

**Subtotal: 80**

### AAT Degree Requirements

Technical Course Requirements	80
AAT General Education Requirements	18

**Subtotal: 98**

AAT Degree General Education Requirements: See list below

### AAS-T Degree Requirements

Technical Course Requirements	80
AAS-T Degree General Education Requirements	23

**Subtotal: 103**

AAS-T Degree General Education Requirements: See list below

**Clover Park Technical College and Washington State University (WSU) have agreed upon a Customized**

**Articulation Agreement, which states that students who complete the Architectural Engineering Design AAS-T at Clover Park with at least a 3.0 cumulative grade point average will be certified as Architectural Studies majors at WSU and will be granted junior standing.**

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
MAT 103	Business Mathematics	5
	Or	
MAT 105	Mathematics for Industrial Professionals	5
	Or	
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning:		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional	5

	Trigonometry	
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

*NOTE: MATH& 141 preferred.*

5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

**Subtotal: 5**

3 credits in College Success:

COLL 102	College Success for All	3
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**Architectural CAD Drafting Certificate**

Prepares students for entry-level careers in computer-aided drafting within the construction industry. Students will learn to create drawings and plans that show the technical details of an architectural structure from all angles.

CAD drafters use information provided by engineers, architects and clients to develop technical drawings that visually present the project and include essential details.

The certificate is a pathway to the Architectural Engineering Design associate degree program.

**Program Length**

This three-quarter certificate is specifically developed to provide students with assistance in gaining the skills they will need to be successful in the industry.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

*Computer skills are highly recommended prior to starting ARC courses.*

**Program Course List**

ARC 120	Residential Drafting & Design I	4
ARC 124	Residential Drafting & Design II	5
ARC 126	Residential Drafting & Design III	5
ARC 146	Detailing and Light Construction	4
ARC 150	Construction Materials Research	4
ARC 171	Drafting Technologies I	5
ARC 175	Civil Engineering	4
ARC 183CL	Introduction to CAD Drafting	4
ARC 262	Intro to 3D Modeling	3
COLL 102	College Success for All	3

**Subtotal: 41**

## Automotive Collision Technician

### Automotive Collision Technician Associate of Applied Technology Degree

Skilled automotive collision technicians may be employed in new car dealerships, independent auto collision shops, and industrial and government agency motor pools.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**General Degree Requirements**

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer-literacy requirements.

Students entering the Automotive Collision Technician degree from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Automotive Collision Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.

**Program Length**

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Program Outcomes**

- Perform high-quality repairs based on diagnosis of collision damage.
- Apply professional automobile painting and refinishing skills.
- Create collision repair estimates with computer software.
- Use industry standards at all times in the shop.
- Perform correction of finish imperfections/defects to industry standards.
- Use vehicle detailing skills post-repair to return to pre-accident condition.
- Perform repairs on damaged panels with industry approved techniques.
- Apply manufacturer guidelines when making repairs.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate



placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

#### Program Course List

ACT 102	Fundamentals of Collision Repair	3
ACT 106	Body Shop Equipment	3
ACT 110	Welding, Heating, & Cutting	4
ACT 115	Plastics/SMC Repair	4
ACT 120	Glass, Trim, & Hardware	5
ACT 125	Introduction to Metal Straightening	3
ACT 132	Panel Replacement	6
ACT 133	Panel Repair	6
ACT 134CAP	Auto Collision Major Repair	5
ACT 141	Auto Body Aluminum Repair	4
ACT 145	Collision Estimating	5
ACT 151	Refinish Equipment Preparation	6
ACT 154	Topcoat Refinishing	8
ACT 156	Pre-Prime Preparation	5
ACT 157	Post-Prime Preparation	5
ACT 166CAP	Surface Imperfections/Exterior Trim	5
ACT 171	Plastic Refinishing	5
ENGL& 101	English Composition I	5
CMST& 220	Or	
	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
SOC&	Or	
	Introduction to Sociology	5

101DIV	Or	
PSY 112DIV	Psychology of the Workplace	5
	Computer Literacy Requirement	3
COLL 102	College Success for All	3
		<b>Subtotal: 122</b>

#### NOTE:

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam.*

*ACT 120: Articulated courses with high schools for dual enrollment.*

### Refinishing Technician Certificate

Skilled automotive collision refinishing technicians may be employed in new car dealerships and independent auto collision shops, as well as industrial and government agency motor pools.

Graduates of this program will enter the trade with considerable practical skills gained through hands-on repair experience throughout the program.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

Students entering the Refinishing Technician certificate from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Refinishing Technician certificate. They will be required to take IAUT 140 Basic Automotive Welding.

#### Program Length

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer, fall, winter, and spring quarters.

## Completion Requirements

### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

Introduction To Automotive List		
IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4
		<b>Subtotal: 19</b>

### Program Course List

ACT 141	Auto Body Aluminum Repair	4
ACT 145	Collision Estimating	5
ACT 151	Refinish Equipment Preparation	6
ACT 154	Topcoat Refinishing	8
ACT 156	Pre-Prime Preparation	5
ACT 157	Post-Prime Preparation	5
ACT 166CAP	Surface Imperfections/Exterior Trim	5
ACT 171	Plastic Refinishing	5
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking  Any 100-Level Math Class	5 5
PSYC& 100DIV	General Psychology  Or	5
SOC& 101DIV	Introduction to Sociology  Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 80</b>

## Structure Repair Technician Certificate

Skilled automotive collision structure repair technicians may be employed in new car dealerships and independent auto collision shops, as well as industrial and government agency motor pools.

Graduates of this program will enter the trade with considerable practical skills gained through actual hands-on repair experience throughout the program.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

### Program Length

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

Introduction To Automotive List		
IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2

IAUT 140	Basic Automotive Welding	4
		<b>Subtotal: 19</b>

#### Program Course List

ACT 102	Fundamentals of Collision Repair	3
ACT 106	Body Shop Equipment	3
ACT 110	Welding, Heating, & Cutting	4
ACT 115	Plastics/SMC Repair	4
ACT 120	Glass, Trim, & Hardware	5
ACT 125	Introduction to Metal Straightening	3
ACT 132	Panel Replacement	6
ACT 133	Panel Repair	6
ACT 134CAP	Auto Collision Major Repair	5
ACT 141	Auto Body Aluminum Repair	4
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 80</b>

#### NOTE:

*ACT 120 is articulated with high schools for dual enrollment.*

## Automotive Restoration and Customization – Finishing Certificate

Focuses on exterior repair and restoration, customization, preparation for paint, stock, and/or custom finishing.

Designed to provide entry-level knowledge and skills necessary to restore and/or customize vehicles.

Students will participate in realistic training activities as part of their educational experience and/or will work on their own projects.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences

that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

#### Program Length

This program is approximately four to six quarters long after meeting prerequisites, depending on the time students need to satisfactorily complete all graduation requirements and prerequisites, master the skills and techniques covered, and finish a capstone project.

#### Admission Dates

Summer, fall, winter, and spring quarters, by instructor’s permission only.

#### Program Outcomes

- Operate panel forming equipment safely.
- Manufacture repair/replacement panels.
- Apply custom surface finishes.
- Disassemble projects in an organized manner.
- Assemble vehicles to restoration/show standards.
- Create replacements for obsolete parts.
- Map out repair/customizing plan.
- Perform correction of finish imperfections/defects to show or display standards.

#### Completion Requirements

#### Prerequisite(s)

Instructor Permission Only. Students must also have successfully completed the entire Automotive Collision Program or equivalent.

#### Program Course List

ARCF 103	Fundamentals & Shop Equipment	3
ARCF 109	Welding & Metal Skills	4
ARCF 114	Basic Repairs & Assembly	8
ARCF 119	Custom Fabrication	6
ARCF 124	Refinishing Equipment	4
ARCF 129	Refinish Preparation	7
ARCF 134	Custom Refinishing	6

ARCF 141	Surface Imperfections/Show & Shine	4
ARCF 154	Automotive Restoration & Customization Finishing Lab	4-9
ARCF 167	Custom Paint Application	3
ARCF 168	Applied Metal Skills	3
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
<b>Subtotal: 70-75</b>		
Recommended Electives		
ARCF 130	Advanced Paint Application	4-6
ARCF 133	Fiberglass/Composites Techniques	4-6
ARCF 159	Metal Straightening & Shaping	4-6
ARCF 170	Custom Refinishing Special Projects	4-6

## Automotive Technician

### Automotive Technician Associate of Applied Technology Degree

This ASE-certified program prepares students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification. Cooperative work experience is available with instructor's permission. Credits will depend on time spent in co-op.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

#### General Degree Requirements

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or

higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity and computer literacy requirements.

#### Program Length

This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

#### Admission Dates

Fall and spring. Summer and winter quarters with instructor's permission only.

#### Program Outcomes

- Apply appropriate industry standards and practices to diagnose and repair customer-owned vehicles.
- Use modern automotive diagnostic and repair equipment appropriately.
- Use printed and computer-based service repair information.
- Use hand and power tools appropriately in an automotive repair environment.
- Apply appropriate mathematical skills in the process of diagnosis and repair of automobiles.
- Model ethical and professional behavior including customer communication skills essential to the requirements of the automotive repair workplace.
- Demonstrate hands-on competency in the eight Automotive Service Excellence task areas.

#### Completion Requirements

##### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

##### Introduction To Automotive List

IAUT 104 Introduction to Automotive

IAUT 105	Electrical Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4
<b>Subtotal: 19</b>		

Program Course List

AUT 147	Automotive Brakes	6
AUT 149	Automotive Suspension, Steering, & Wheel Alignment	7
AUT 157	Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab	6
AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical Repair	7
AUT 178	Engine Mechanical Lab	3
AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9
AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7
AUT 239	Automotive Clutches & Manual Transmissions	9
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT 251CAP	Automatic Transmission/Transaxle Lab	4
AUT 255	Automotive Air Conditioning, Heating & Ventilation	6
AUT 270	Introduction to Hybrid Safety	4
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	

PSY 112DIV	Psychology of the Workplace	5
	Computer Literacy Requirement	3
COLL 102	College Success for All	3
<b>Subtotal: 159</b>		

NOTE:

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**AUT 147-236 must be taken in consecutive order. Students must take AUT 209 and AUT 212 prior to AUT 255 .**

Optional Course

AUT 295	On-the-Job Training/Work-Based Learning	1-12
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Optional Electives

Students may also choose to take any course in the following programs as an optional elective for this program: Auto Collision, Auto Restoration and Customization, and Automotive Hybrid.

Students entering the Auto Technician degree from the Ford Maintenance & Light Repair Technician program will not be required to repeat equivalent courses upon entering the Auto Technician degree program. They will be required to take IAUT 140 Basic Automotive Welding.

### Drive Train Technician Certificate

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses

must be completed with a “C” (2.0) GPA or higher.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

**Introduction To Automotive List**

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

**Program Course List**

AUT 239	Automotive Clutches & Manual Transmissions	9
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT 251CAP	Automatic Transmission/Transaxle Lab	4
ENGL& 101	English Composition I	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5

PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 74</b>

**Electrical, Electronics and AC/Heating Technician Certificate**

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision

Technician programs.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

#### Program Course List

AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9
AUT 255	Automotive Air Conditioning, Heating & Ventilation	6
COLL 102	College Success for All	3

**Subtotal: 44**

## Engine Repair and Engine Performance Technician Certificate

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C” (2.0) GPA or higher.

#### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

By instructor’s approval.

#### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

#### Introduction To Automotive List

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

#### Program Course List

AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical Repair	7
AUT 178	Engine Mechanical Lab	3
AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9
AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7

ENGL& 101	English Composition I Or	5
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CMST& 220	Public Speaking	5
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Any 100-Level Math Class 5

PSYC& 100DIV	General Psychology	5
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Or  
Introduction to Sociology 5

SOC& 101DIV	Introduction to Sociology	5
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Or  
Psychology of the Workplace 5

PSY 112DIV	Psychology of the Workplace	5
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COLL 102	College Success for All	3
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**Subtotal: 90**

*NOTE:*

*AUT 174-AUT 236 must be taken in consecutive order.*

## Ford Maintenance and Light Repair Technician Associate of Applied Technology Degree

This program is currently not admitting new students.

Designed by Ford Motor Company to prepare students with the basic skills needed to gain employment as a maintenance and light repair technician.

In addition to Ford training, students receive hands-on experience working with Ford vehicles and using the latest Ford diagnostic tools.

The program is also designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training that prepares them for pre-apprenticeship training and ASE certification. Cooperative work experience is available with instructor's permission. Credits will depend on time spent in co-op.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

### General Degree Requirements

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of "C" (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a "C" (2.0) GPA or higher.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

### Program Length

This program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Students transferring to the Automotive Technician degree program may need to withdraw for one or two quarters to finish their program of study.

### Admission Dates

Fall, winter, and spring quarters, or by instructor's permission.

### Program Outcomes

- Apply appropriate industry standards and Ford practices to diagnose and repair automotive vehicles.
- Use modern automotive diagnostic and repair equipment properly.
- Use printed and computer-based Ford service repair information for vehicle repair procedures.
- Use hand and power tools appropriately in an automotive repair environment.
- Apply appropriate mathematical skills in the process of diagnosis and repair of automobiles.
- Model ethical and professional behavior including customer communication skills essential to the requirements of the automotive repair workplace.
- Demonstrate hands-on competency in the areas of steering and suspension, electrical systems, brake systems, and climate control.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in FAUT.

#### Program Course List

FAUT 120	Ford Introduction to Automotive	2
FAUT 144	Ford Basic Electrical Systems Diagnosis and Testing	6
FAUT 147	Ford Automotive Brakes	6
FAUT 149	Ford Automotive Suspension, Steering, & Wheel Alignment	7
FAUT 157	Ford Automotive Brakes, Suspension, Steering, & Alignment Lab	5
FAUT 172	Ford Base Steering, Suspension, & Alignment	6
FAUT 179	Ford General Maintenance & Tires	7
FAUT 185	Ford Brake Systems Diagnosis	2
FAUT 209	Ford Electronic Systems	7
FAUT 212	Ford Electrical Systems	9
FAUT 255	Ford Air-Conditioning, Heating & Ventilation	6
IAUT 140	Basic Automotive Welding	4
AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical	7



	Repair	
AUT 178	Engine Mechanical Lab	3
AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7
AUT 239	Automotive Clutches & Manual Transmissions	9
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT	Automatic	4
251CAP	Transmission/Transaxle Lab	
AUT 270	Introduction to Hybrid Safety	4
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	Computer Literacy Requirement	3
	<b>Subtotal: 167</b>	

**NOTE:**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Optional Course**

AUT 295	On-the-Job Training/Work-Based Learning	1-12
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**Optional Electives**

Students may also choose to take any course in the following programs as an optional elective for this program: Auto Collision, Auto Restoration and Customization, and Automotive Hybrid.

## Ford Maintenance and Light Repair Technician Certificate

This program is currently not admitting new students.

Designed by Ford Motor Company to prepare students with the basic skills needed to gain employment as a maintenance and light repair technician.

In addition to Ford training, students receive hands-on experience working with Ford vehicles and using the latest Ford diagnostic tools.

The program is also designed to prepare students for entry-level positions as automotive technicians. Students participate in realistic training that prepares them for pre-apprenticeship training and ASE certification.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. Students must also successfully complete ENG 094 and MAT 094 by the end of the second quarter.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Students continuing with the Ford Maintenance and Light Repair Technician degree program may need to withdraw for one or two quarters depending on sequence of courses offered.

**Admission Dates**

Fall, winter, and spring quarters.

**Completion Requirements****Prerequisite(s)**

Upon completion of the Ford MLR program, students may transfer to the Automotive Technician or the Automotive Collision degree program. Four additional quarters would be required to complete the AAT degree. Students entering the Automotive Technician program or the Automotive Collision program from the Ford MLR program will not be required to repeat equivalent courses. Students will be

required to take IAUT 140 Basic Automotive Welding.

**Program Course List**

FAUT 120	Ford Introduction to Automotive	2
FAUT 144	Ford Basic Electrical Systems Diagnosis and Testing	6
FAUT 147	Ford Automotive Brakes	6
FAUT 149	Ford Automotive Suspension, Steering, & Wheel Alignment	7
FAUT 157	Ford Automotive Brakes, Suspension, Steering, & Alignment Lab	5
FAUT 172	Ford Base Steering, Suspension, & Alignment	6
FAUT 179	Ford General Maintenance & Tires	7
FAUT 185	Ford Brake Systems Diagnosis	2
FAUT 209	Ford Electronic Systems	7
FAUT 212	Ford Electrical Systems	9
FAUT 255	Ford Air-Conditioning, Heating & Ventilation	6
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	<b>Subtotal: 81</b>	

**Front End and Brakes Technician Certificate**

This ASE-certified program is designed to prepare students for entry-level positions as automotive technicians.

Students participate in realistic training experiences that prepare them for pre-apprenticeship training and ASE certification.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or

higher. To remain in the program, all students must have the required textbooks and tools by the start of the third week of classes.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of Introduction to Automotive, Ford Maintenance & Light Repair Technician certificate, or equivalent.

**Introduction To Automotive List**

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

**Program Course List**

AUT 147	Automotive Brakes	6
AUT 149	Automotive Suspension, Steering, & Wheel Alignment	7
AUT 157	Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab	6
COLL 102	College Success for All	3

**Subtotal: 41**

*Note: AUT 147, AUT 149 and AUT -157 must be taken in consecutive order.*

**Hybrid and Alternative Fuel Vehicle Technician Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program is currently not admitting new students.

This ASE-certified program prepares students for entry-level positions as automotive technicians. This degree builds upon the Automotive Technician program by providing an additional quarter of study focused specifically on hybrid and alternative fuel vehicles. Students participate in realistic training that prepares them for employment and ASE certification.

**Program Length**

This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters. Summer and winter quarters with instructor’s permission only. Hybrid courses are taught summer quarter only.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a “C+” (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs.

**Introduction To Automotive List**

IAUT 104	Introduction to Automotive Electrical	4
IAUT 105	Introduction to Automotive Trades	4
IAUT 115	Introduction to Automotive Steering, Suspension & Brakes	5
IAUT 130	Automotive HVAC	2
IAUT 140	Basic Automotive Welding	4

**Subtotal: 19**

**Program Course List**

AUT 147	Automotive Brakes	6
AUT 149	Automotive Suspension, Steering, & Wheel Alignment	7
AUT 157	Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab	6
AUT 174	Engine Minor Mechanical Repair	6
AUT 175	Engine Major Mechanical	7

	Repair	
AUT 178	Engine Mechanical Lab	3
AUT 209	Electronic Systems	7
AUT 212	Electrical Systems	9
AUT 217	Automotive Ignition Systems	7
AUT 223	Automotive Fuel Systems	7
AUT 236	Automotive Emissions Systems	7
AUT 239	Automotive Clutches & Manual Transmissions	9
AUT 243	Automotive Axles, Drivelines, Differentials & Transfer Cases	6
AUT 246	Manual Drive Trains & Axles Lab	4
AUT 247	Automatic Transmissions	7
AUT 250	Automatic Transaxles	7
AUT	Automatic	4
251CAP	Transmission/Transaxle Lab	
AUT 255	Automotive Air Conditioning, Heating & Ventilation	6
AUT 270	Introduction to Hybrid Safety	4
AUTH 105	Hybrid/Alternate Fuel Introduction & Safety	2
AUTH 110	Alternate Fuel Vehicle Systems	2
AUTH 115	Toyota Hybrid System Overview	2
AUTH 120	Toyota Prius Hybrid System	2
AUTH 125	Honda Hybrid System Overview	2
AUTH 130	Honda Civic IMA Hybrid System	2
AUTH 135	Ford Escape/Mercury Mariner Hybrid System Overview	2
AUTH 140	General Motors & Other Hybrid Systems Overview	2
AUTH 145	Advanced Lab & Final Exam Preparation	2

**Subtotal: 156**

*Note: Must take AUT 209 and AUT 212 prior to AUT 255.*

**AAT Requirements**

Technical Course Requirements	156
Computer Literacy Requirement	3
AAT General Education Requirements	18

**Subtotal: 177**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam.*

AAT General Education Requirements: See list above

AAS-T Requirements	
Technical Course Requirements	156
Computer Literacy Requirement	3
AAS-T Degree General Education Requirements	23

**Subtotal: 182**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam.*

AAS-T Degree General Education Requirements: See list above

**General Degree Requirements**

Students in Automotive Technician, Ford MLR, or Automotive Collision Technician programs must pass all program classes with a grade of “C” (2.0) or higher in order to enroll in the next quarter program courses shown on the degree or certificate education plan. To remain in the program, all students must have the required textbooks by the start of the third week of classes and the required tools by the start of the second quarter. To receive a certificate or degree in an automotive program, all courses must be completed with a “C (2.0) GPA or higher.

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*NOTE: CMST 220 or higher*

*PSYC 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement.*

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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## Hybrid and Alternative Fuel Vehicle Technician Certificate

This program is currently not admitting new students.

This certificate covers the history and evolution of hybrid, electric and alternate-fuel vehicles; general safety precautions and procedures; and required and recommended tools for servicing. This certificate is designed to give students the theory and hands-on experience needed to safely and confidently service this growing vehicle population.

To receive a certificate or degree in an automotive program, all courses must be completed with a 2.0 GPA or higher. To remain in the program, all students must have the required textbooks by the start of the third week of classes and must have the required tools by the start of the second quarter.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

### Admission Dates

Hybrid courses are taught summer quarter only. Fall and spring admission to the Automotive Technician program.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Successful completion of Introduction to Automotive or Ford Maintenance & Light Repair Technician certificate, or equivalent with a "C+" (2.3) in each IAUT and FAUT class in order to register for first quarter classes in Automotive Technician or Automotive Collision Technician programs. Graduation from an ASE/NATEF certified program or two years of industry experience with instructor's permission. Must have approved safety glasses, coveralls and high-voltage gloves.

#### Program Course List

AUTH 105	Hybrid/Alternate Fuel Introduction & Safety	2
AUTH 110	Alternate Fuel Vehicle Systems	2
AUTH 115	Toyota Hybrid System	2

	Overview	
AUTH 120	Toyota Prius Hybrid System	2
AUTH 125	Honda Hybrid System	2
	Overview	
AUTH 130	Honda Civic IMA Hybrid System	2
AUTH 135	Ford Escape/Mercury Mariner Hybrid System Overview	2
AUTH 140	General Motors & Other Hybrid Systems Overview	2
AUTH 145	Advanced Lab & Final Exam Preparation	2

**Subtotal: 18**

## Aviation Maintenance Technician

### Aviation Maintenance Technician Associate of Applied Technology Degree / Associate in Applied Science – T Degree

This FAA-approved program is designed to prepare students for entry-level positions in the aircraft-maintenance industry. Graduates will meet Federal Aviation Administration (FAA) education requirements for FAA testing for issuance of airframe and powerplant certificates. Aviation maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft, including airplanes and helicopters and their propulsion systems. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification testing upon completion of required technical credits.

Future employment may include positions with major and regional airlines, aircraft and rotorcraft repair and maintenance facilities, airline and corporate jet refurbishing repair stations, and aircraft and component manufacturing.

Courses are offered at the South Hill Campus in Puyallup.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

### Employability Requirements

Graduates must pass Federal Aviation Administration certification exams and meet literacy requirements.

### Program Length

This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

MAT 114	Basic Mathematics, Basic Physics, Weight and Balance	5
AMT 109	Basic Electricity	4
AMT 116	Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings	5
AMT 119	Materials & Processes	5
AMT 125	Advanced Electricity	4
AMT 127	Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations	4
AMT 132	Wood Structures, Aircraft Coverings, & Finishes	4
AMT 133	Aircraft Fuel Systems, Ice & Rain Control Systems, & Fire Protection Systems	4
AMT 135	Sheet Metal Structures	4
AMT 136	Welding, Position & Warning Systems	3
AMT 137	Non-Metallic Structures	4
AMT 138	Aircraft Inspections	4
AMT 139	Assembly & Rigging	4
AMT 140	Aircraft Landing Gear	3
AMT 141	Hydraulic & Pneumatic Power Systems	3
AMT 142	Hangar Operations & Maintenance	3
AMT 143	Airframe Electrical Systems	5
AMT 144	Engine Electrical Systems	5
AMT 145	Cabin Atmosphere Control Systems	3
AMT 146	Aircraft Instrument, Communication & Navigation Systems	3
AMT 208	Helicopter Operations & Maintenance Practices	4
AMT 210	Basic Rotor Systems	4

	Maintenance & Repair	
AMT 212	Advanced Rotor Systems Maintenance & Repair	4
AMT 215	Helicopter Systems	4
AMT 217	FAA Testing & Turbine Engines	7
AMT 219	Engine Lubrication Systems	4
AMT 221	Engine Instrument Systems	4
AMT 224	Powerplant Reciprocating Engine Theory	6
AMT 225	Powerplant Maintenance & Operation	6
AMT 226	Engine Fuel System & Fire Protection	1
AMT 228	Engine Fuel Metering Systems	5
AMT 229CAP	Propellers & FAA Final Testing	4
AMT 231	Engine Inspection	4
AMT 233	Engine Ignition & Starting Systems	4
AMT 235	Induction, Airflow, Cooling & Exhaust Systems	3
AMT 239	Advanced Hangar Operations & Maintenance	3

**Subtotal: 146**

**Note:**

- In lieu of MAT 114, students may also take both AMT 104 and MAT 105 to satisfy the math requirement for the AAT degree.
- AAS-T degree requires AMT 104 or MAT 114 in addition to a transferable math credit.
- AMT 142 and AMT 239 are offered in Winter Quarter only

**AAT Degree Requirements**

Technical Course Requirements	146
Additional AAT General Education Requirements	13-18
Computer Literacy	3

**Subtotal: 162-167**

AAT Degree General Education Requirements: See list below

Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam

**AAS-T Degree Requirements**

Technical Course	146
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Requirements	
AAS-T Degree General Education Requirements	23
Computer Literacy Requirement	3

**Subtotal: 172**

AAS-T Degree General Education Requirements: See list below

Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam

### General Degree Requirements

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.

AAT Degree General Education Requirements (13-18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
PSYC& 100DIV	General Psychology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
MAT 105	Mathematics for Industrial Professionals	5
COLL 102	College Success for All	3

- MAT 105 is only required if students take AMT 104 instead of MAT 114.

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:		
ENGL& 101	English Composition I	5

5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional	5

	Trigonometry	
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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## Airframe Maintenance Technician Certificate

This FAA-approved program is designed to prepare students for entry-level positions in the aircraft maintenance industry. Graduates will meet education requirements for FAA testing for issuance of an airframe

certificate. Airframe maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft, including airplanes and helicopters. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification testing upon completion of required technical credits.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Note:** Graduates must meet FAA literacy requirements and complete technical credits for FAA certification.

**Employability Requirements**

Graduates must pass Federal Aviation Administration certification exams and meet literacy requirements.

**Program Length**

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

MAT 114	Basic Mathematics, Basic Physics, Weight and Balance	5
AMT 109	Basic Electricity	4
AMT 116	Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings	5
AMT 119	Materials & Processes	5
AMT 125	Advanced Electricity	4
AMT 127	Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations	4
AMT 132	Wood Structures, Aircraft Coverings, & Finishes	4
AMT 133	Aircraft Fuel Systems, Ice & Rain Control Systems, & Fire Protection Systems	4
AMT 135	Sheet Metal Structures	4

AMT 136	Welding, Position & Warning Systems	3
AMT 137	Non-Metallic Structures	4
AMT 138	Aircraft Inspections	4
AMT 139	Assembly & Rigging	4
AMT 140	Aircraft Landing Gear	3
AMT 141	Hydraulic & Pneumatic Power Systems	3
AMT 142	Hangar Operations & Maintenance	3
AMT 143	Airframe Electrical Systems	5
AMT 145	Cabin Atmosphere Control Systems	3
AMT 146	Aircraft Instrument, Communication & Navigation Systems	3
AMT 208	Helicopter Operations & Maintenance Practices	4
AMT 210	Basic Rotor Systems Maintenance & Repair	4
AMT 212	Advanced Rotor Systems Maintenance & Repair	4
AMT 215	Helicopter Systems	4
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
		<b>Subtotal: 103-108</b>

*NOTE:*

- In lieu of MAT 114, students may also take both AMT 104 and MAT 105 to satisfy the math requirement for the certificate.
- An additional 100 level math class is only required if students take AMT 104 instead of MAT 114.
- AMT 142 is offered in Winter Quarter only.

**Powerplant Technician Certificate**

This FAA-approved program is designed to prepare students for entry-level positions in the aviation engine



maintenance industry. Graduates will meet education requirements for FAA testing for issuance of a powerplant certificate. Powerplant maintenance technicians are qualified to perform service or make repairs on all types and sizes of private and commercial aircraft propulsion systems. Related fields include aircraft and component manufacturing. Students are eligible for FAA certification testing upon completion of required technical credits.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

**Note:** Graduates must meet FAA literacy requirements and complete technical credits for FAA certification.

**Note:** Transfer students will have their transcripts evaluated by the Aviation Maintenance staff in accordance with FAR Part 147 to determine their qualification and placement in any of the Aviation Maintenance Technician programs.

### Employability Requirements

Graduates must pass Federal Aviation Administration certification exams and meet literacy requirements.

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

MAT 114	Basic Mathematics, Basic Physics, Weight and Balance	5
AMT 109	Basic Electricity	4
AMT 116	Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings	5
AMT 119	Materials & Processes	5
AMT 125	Advanced Electricity	4
AMT 127	Maintenance Forms & Records, Publications, and	4

	Mechanics Privileges & Limitations	
AMT 142	Hangar Operations & Maintenance	3
AMT 144	Engine Electrical Systems	5
AMT 217	FAA Testing & Turbine Engines	7
AMT 219	Engine Lubrication Systems	4
AMT 221	Engine Instrument Systems	4
AMT 224	Powerplant Reciprocating Engine Theory	6
AMT 225	Powerplant Maintenance & Operation	6
AMT 226	Engine Fuel System & Fire Protection	1
AMT 228	Engine Fuel Metering Systems	5
AMT 229CAP	Propellers & FAA Final Testing	4
AMT 231	Engine Inspection	4
AMT 233	Engine Ignition & Starting Systems	4
AMT 235	Induction, Airflow, Cooling & Exhaust Systems	3
	English Composition Or Public Speaking	5
	General Psychology	5
COLL 102	College Success for All	3
	<b>Subtotal: 96-101</b>	

#### NOTE:

- In lieu of MAT 114, students may also take both AMT 104 and MAT 105 to satisfy the math requirement for the certificate.
- An additional 100 level math class is only required if students take AMT 104 instead of MAT 114.
- AMT 142 and AMT 239 are offered in winter quarter only.

## Avionics Technician

### Avionics Technician Certificate

This two-quarter program is designed to provide students with a foundation in aircraft electronics and digital

**Subtotal: 44**

instrument systems and prepare individuals to apply technical knowledge and skills to repair, service, and maintain operating, control, and electronic systems including instruction in flight instrumentation, aircraft communications and homing systems, radar and other sensory systems, navigation aids, and specialized systems for various types of civilian and military aircraft.

Students will receive an introduction to schematic reading, OSHA/FAA/Basic electrical safety, tools of the trade, and basic electrical components. Students will also learn introductory techniques for troubleshooting and repairing aircraft electronic instrument systems.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Perform repairs and general maintenance on aircraft electronic system.
- Interpret applicable FAA and FCC regulations, aircraft service records, original equipment manufacturer technical manuals, schematics, and directives.
- Apply industry safety standards when performing aircraft electrical maintenance.
- Ensure safety of flight for aircraft navigation systems and aides.
- Troubleshoot electrical based aircraft systems necessary for safe and sustained flight.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

AVIO 105	Basic Electricity	6
AVIO 107	Circuit Theory	6
AVIO 110	Electrical components	6
AVIO 115	Hazards and Safety	3
AVIO 120	RF Circuits	8
AVIO 125	Digital Logic	5
AVIO 130	Aircraft Maintenance Practices	5
AVIO 135	Aircraft Handling and Testing	2
COLL 102	College Success for All	3

**Central Service/Sterile Processing**

**Central Service/Sterile Processing Certificate**

Graduates of this program are educated and trained in Central Service/ Sterile Processing (CS/SP) technology, under the guidelines of Healthcare Sterile Processing Association and the local Healthcare Advisory Committee.

The structured curriculum consists of basic sciences, infection control, sterilization, human relations, necessary job skills, and clinical internships in area healthcare facilities. There is an emphasis on care and preparation of surgical instruments. Classroom instruction and clinical internship prepare the student to assume the role of a CS/SP technician in a variety of health care delivery settings.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

No student will be allowed at clinical sites without proof of insurance.

**Physical Activity Requirements**

This occupation requires the ability to lift 50 lbs. and work on your feet for up to eight hours. Students must be able to meet these physical requirements in order to be assigned to a clinical rotation and meet employment demands.

**Employability Requirements**

High school diploma or equivalent. Upon graduation, students are eligible to sit for the Healthcare Sterile Processing Association Certification Exam, which is honored nationally and internationally. Must meet facility eligibility requirements, including a criminal background check, in order to apply for employment. Persons with some types of criminal convictions may not be eligible for hire.

**Program Length**

This program is a combination of on-line, classroom, laboratory and clinical experience, approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters

**Completion Requirements****Prerequisite(s)**

Successful completion of ENGF 091 or equivalent. Basic computer skills recommended.

In order to participate in the clinical aspect of the program, students must receive a “No Record On File” report from a criminal background check (there are some exceptions; contact instructor for details). A non-refundable fee is charged to each student for the background check. Students must have current immunizations or laboratory verification of immune status. This could include, but may not be limited to, Hepatitis B series, Tdap, 2-Step Tuberculosis Test, Measles/Mumps/Rubella, Varicella, and seasonal flu shot as required by contracts with clinical facilities. Proof of immunity is required by the last week of the first quarter in order to participate in the clinical portion of the program.

Students must provide a transcript showing high school graduation or completion of a high school equivalency diploma. Must complete the American Heart Association’s BLS for health care provider CPR Course prior to the last week of the first quarter (not included in the program).

**Program Course List**

CSSP 101	Intro Central Service/ Sterile Processing	4
CSSP 105	Sterile Processing Theory	4
CSSP 125	Surgical Instrumentation	6
CSSP 126	Principles & Methods of Cleaning & Disinfecting	6
CSSP 129	Principles & Practices of Sterilization	6
CSSP 132	Materiel Management/Central Service Applications	3
CSSP 213	Clinical Internship I	6
CSSP 215	Clinical Internship II	6
COLL 102	College Success for All	3

**Subtotal: 44**

## Computer Programming

### BS Computer Science and Cyber-Physical Software Engineering

**BACHELOR OF SCIENCE DEGREE**

CPTC’s Bachelor of Science in Computer Science Cyber-Physical Software Engineering (BS-CS-CPSE) degree has been designed to meet the needs of students who want to work in industry developing software.

In the BS-CS-CPSE program, students will learn about software engineering best practices, such as algorithms, testing, version control, code reviews, design patterns, and refactoring. Students will have many opportunities to apply these skills on projects that are relevant to industries. BS-CS-CPSE courses and capstone projects help develop the critical thinking skills required for a successful career in a Computer Science Software Engineering role.

This degree has been designed to meet the educational needs of traditional students and working adults. It is based on a combination of web-based instruction, interactive on-line, and hands-on work.

**Program Length**

The program is approximately six quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall quarter or Spring quarter.

**Completion Requirements****Prerequisite(s)****Admission to the Program**

**Admission to the program may occur when the following can be documented:**

- Successful completion (or proof of enrollment in the last quarter thereof) of either:
  - Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree in Computer Science or equivalent from a regionally accredited institution with a minimum GPA of 2.3. **OR**
  - An earned Applied Associate degree, AAS-T,

Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited institution **with a minimum 2.3 GPA and** proof of enrollment in the Computer Science technical bridge courses **OR**

- An appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.
- A minimum grade of 2.0 is required in all prerequisite coursework.
- 5 college-level credits in English Composition (ENGL 101 or higher).
- 5 college-level credits in a transferable social science course.
- 5 college level credits in CPW 140 Java Object Oriented Programming I, or equivalent.
- 5 college level credits in CPW 141 Java Object Oriented Programming II, or equivalent.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 4 credits of CPW 228 C++ or equivalent.
- 4 credits of CPW 207 Object-Oriented Analysis Design or equivalent.
- 5 credits in CPW 245 Data Structures or equivalent.

**Graduation Requirements**

To successfully complete the degree, students must maintain a minimum grade of 2.0 in all coursework, including “bridge” quarter courses, program courses, and general education courses.

**Second Baccalaureate Degree General Education Requirements**

Applicants who have already earned a baccalaureate degree from an accredited college or university may be able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

Students must still complete program-specific general education degree requirements if not otherwise satisfied. The program-specific general education requirements in the BS-CS-CPSE degree are listed below:

- Pre-calculus I or equivalent
- Pre-calculus II or equivalent
- Technical Writing or equivalent
- Professional Ethics or equivalent

**Program Course List**

CPW 300	Discrete Structures	5
CPW 310	Computer Architecture & Operating Systems (Embedded Systems)	5
CPW 320	Algorithms	5
CPW 330	Software Design	5
CPW 400	Software Capstone I	5
CPW 410	Software Capstone II	5
CPW 420	Software Capstone III	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
PHIL 310DIV	Professional Ethics	5
ENGL& 235	Technical Writing	5
	Any Lab-Based Science	5
	Humanities Elective	5
	Any 100 Level or above transferrable general education course	5
	Any 100 Level or above transferrable general education course	5
	MEC Electives from the list below	15
MEC 307	Industrial Internet of Things - Knowledge	1-24
MEC 407	Industrial Internet of Things - Skill	1-24
MEC 317	Programming for Industry 4.0 - Knowledge	1-24
MEC 417	Programming for Industry 4.0 - Skill	1-24
MEC 324	Advanced Embedded Systems - Knowledge	1-24
MEC 424	Advanced Embedded Systems - Skill	1-24
MEC 334	AI and Data Analytics - Knowledge	1-24
MEC 434	AI and Data Analytics - Skill	1-24

MEC 340	Control Systems - Knowledge	1-24
MEC 342	Programmable Automation Controllers - Knowledge	1-24
MEC 442	Programmable Automation Controllers - Skill	1-24
MEC 344	Machine Vision - Knowledge	1-24
MEC 444	Machine Vision - Skill	1-24
MEC 347	Interconnectivity in Cyber- Physical Systems - Knowledge	1-24
MEC 447	Interconnectivity in Cyber- Physical Systems - Skill	1-24
MEC 380	Human-Centric Digitalization - Knowledge	1-24
MEC 480	Human-Centric Digitalization - Skill	1-24
MEC 384	Cyber-Physical Security - Knowledge	1-24
MEC 484	Cyber-Physical Security - Skill	1-24
MEC 385	Management in Industry 4.0 - Knowledge	1-24
MEC 485	Management in Industry 4.0 - Skill	1-24

**Subtotal: 90**

Students who already have Math 141, and/or 142 are required to complete alternative transferable math courses.

## Computer Programming Associate of Applied Technology Degree

This program is designed to prepare students for computer programming and web development positions with concentrations in web programming, database programming, or application systems programming.

The coursework prepares individuals for positions such as .NET developer, ASP.NET web developer, application programmers, programmer/analysts, database designers, and other related information technology positions.

Employers may include business and industrial firms, banks and other financial institutions, government agencies, consulting firms, and software and web development companies.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical skills are built and personal development is enhanced. Students must take all the academic and programming core courses.

### Program Length

This program is a hybrid program, and approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

Prerequisite(s)

Successful completion of ENG 094 and MAT 094 or equivalent and basic competencies with personal computers, Windows- based word processing and spreadsheet software. Touch-typing proficiency of 35 words per minute is recommended.

### Program Course List

CPW 102	Programming Fundamentals	6
CPW 122	Web Design Principles	6
CPW 140	Java Object-Oriented Programming I	6
CPW 141	Java Object-Oriented Programming II	6
CPW 152	Principles of Relational Databases	6
CPW 155	.NET Programming	6
CPW 207	Object-Oriented Analysis & Design	4
CPW 211	Advanced .NET Programming	4
CPW 219	.NET Web Programming	3
CPW 226CAP	Portfolio	4
CPW 228	C++	4
CPW 230	Advanced .NET Web Programming	6
CPW 235	Software Project Development	6
CPW 245	Data & Logic Structures	5
<b>Subtotal: 72</b>		

### AAT Degree Requirements

Technical Course Requirements	72
AAT General Education Requirements	18

**Subtotal: 90**

**General Degree Requirements**

AAT Degree General Education Requirements:

COLL 102	College Success for All	3
ENGL& 101	English Composition I	5
MATH& 146	Introduction to Statistics	5
	Or	
MATH& 141	Precalculus I	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5

**Construction Technologies**

**Construction Technologies Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program is designed to train construction professionals and facilities managers for building applications and systems that consume a minimal amount of non-renewable resources and contribute to environmental and personal health.

This program will prepare graduates for careers in resource energy management, indoor air quality, solar installation, home energy rating systems, and other specialties that support the design, building, and maintenance of sustainable living environments.

Participants will receive a solid foundation in applied mathematics, applied physics, and communication. Students will also receive training in industry-specific applications using energy-efficiency technology to diagnose building deficiencies. Advanced training in sustainable systems, solar (photovoltaic) systems, resource conservation management, and weatherization will prepare graduates for a variety of careers within the construction and utilities industries, including careers as resource conservation managers, energy auditors, weatherization specialists, solar energy specialists, and home energy raters.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Physical Requirements**

Should be able to lift 40 lbs..

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Apply code-mandated repairs to various types of buildings.
- Assess a building's structural and physical integrity with appropriate equipment, technology, and software.
- Integrate renewables into the building as specified by the International Building Code.
- Evaluate building systems.
- Perform a building energy audit to include recommendations.
- Perform scheduling tasks while coordinating with different trades.
- Interpret blueprints, plans, and schematics correctly in order to ensure jobs are completed professionally and on time.
- Use industry safety and environmental standards at all times on construction job sites.
- Apply air leakage repairs in a building shell.
- Integrate green building practices into the construction industry.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CONST 102	Safety & Operating Certificates	3
CONST 104	Trades Math & Print Reading for Const.	5
CONST 106	Basic Carpentry Skills	6
CONST 109	Employment Preparation	4
CONST 112	Footings & Foundations	3
CONST 116	Floor Framing	3
CONST 120	Wall Framing, Sheeting & Ceilings	5
CONST 122	Roof Framing	5
CONST 126	Roofing Materials & Installation	3
CONST 134	Exterior Finish	3
CONST 139	Interior Finish I	5
CONST 142	Interior Finish II	3
CONST 144	Electrical and Plumbing	4

	Basics	
CONST 152	LEED	2
CONST 155	Decking	2
CONST 158	Energy Auditor	5
CONST 160	Home Inspector	4
SBS 107	Sustainability Building Basics	4
SBS 121	Survey of Energy Ratings	3
SBS 130	Alternative Energy Systems	5
SBS 142	Building Envelope	4
SBS 150	Moisture Mitigation	3
SBS 174	Basic Diagnostics and Testing	4
SBS 185CAP	Service Learning Project	3
	Computer Literacy Requirement	3
<b>Subtotal: 94</b>		

**Note: CONST 102-139 are articulated courses with high schools for dual enrollment.**

Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam

AAT Degree Requirements		
	Technical Course Requirements	94
	AAT General Education Requirements	18
<b>Subtotal: 112</b>		

AAT Degree General Education Requirements: See list below

AAS-T Degree Requirements		
	Technical Course Requirements	94
	AAS-T Degree General Education Requirements	23
<b>Subtotal: 117</b>		

AAS-T Degree General Education Requirements: See list below

### General Degree Requirements

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*Note: CMST 220 or higher*

*PSYC 100DIV: PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement.*

AAS-T Degree General Education Requirements (23 credits):

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5

POLS& 202	United States Government	5
PSYC& 100		5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101		5
3 credits in College Success:		
COLL 102	College Success for All	3

## Construction Technology Certificate

This certificate program builds on the knowledge and skills students earn in the C-TAPP certificate, which serves as the first quarter of the program, and provides an introduction to residential construction technologies.

Second quarter expands into foundation form work, floor systems and framing, wall and roof framing, leveling and aligning, and sheeting.

### Physical Requirements

Should be able to lift 40 lbs.

### Program Length

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements

### Admission Dates

Fall and spring quarters.

### Completion Requirements

### Prerequisite(s)

None.

#### Program Course List

CONST 102	Safety & Operating Certificates	3
CONST 104	Trades Math & Print Reading for Const.	5
CONST 106	Basic Carpentry Skills	6
CONST 109	Employment Preparation	4
CONST 112	Footings & Foundations	3
CONST 116	Floor Framing	3
CONST 120	Wall Framing, Sheeting & Ceilings	5
CONST 144	Electrical and Plumbing Basics	4
COLL 102	College Success for All	3

**Subtotal: 36**

*Note: CONST 102-139 are articulated courses with high schools for dual enrollment.*

## Construction Trades Academy Pre-Apprenticeship Program (C-TAPP) Certificate

This apprenticeship readiness program prepares students with the knowledge and skills necessary for employment in the construction industry.

This one-quarter program covers safety, hand and power tool use, math, carpentry trades, print and plan reading, and employment preparation.

Students entering the one-quarter Pre-Apprenticeship Construction Trades program will be required to complete entry and quarterly assessments while enrolled in the program. These assessments will not determine eligibility for the program.

### Physical Requirements

Should be able to lift 40 pounds.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

### Prerequisite(s)

None.

#### Program Course List

CONST 102	Safety & Operating Certificates	3
CONST 104	Trades Math & Print Reading for Const.	5
CONST 106	Basic Carpentry Skills	6
CONST 109	Employment Preparation	4
		<b>Subtotal: 18</b>

*Note: CONST 102-139 are articulated courses with high schools for dual enrollment.*



## Residential Electrician Certificate

Residential Electrician is a dynamic program tailored to equip students with a blend of theoretical knowledge and practical skills essential for a career in the residential electrical industry. Over the course of 18 Months, this comprehensive program delves into the fundamentals of electricity, residential wiring, and electrical theory, while emphasizing adherence to the National Electrical Code (NEC). Students engage in extensive hands-on training, mastering the installation, repair, and maintenance of residential electrical systems. Safety, a paramount concern in the field, is thoroughly integrated into the curriculum, ensuring graduates are well-versed in best practices and safety standards.

A distinctive feature of the program is its focus on emerging technologies, such as smart home systems and energy-efficient solutions, preparing students for the evolving landscape of residential electrification. The curriculum also hones critical thinking and problem-solving skills, essential for diagnosing and resolving electrical issues. In addition to technical training, the program covers project management, customer service, and professional ethics, thus grooming students for the professional aspects of their future careers.

The course structure balances core electrical courses with general education, encompassing topics like electrical system design, blueprint reading, renewable energy systems, and troubleshooting techniques. Graduates emerge as well-rounded professionals, ready to embark on careers as residential electricians, electrical technicians, or systems designers. The program is bolstered by experienced faculty, state-of-the-art facilities, and robust career support services, including job placement assistance. Ideal for those aspiring to a future in residential electrical work, the Residential Electrician certificate offers an educational experience that is both comprehensive and aligned with the industry's current and future needs.

### Physical Requirements

The Residential Electrician certificate demands a set of physical requirements vital for success in the field. Firstly, students must possess good hand-eye coordination and manual dexterity, crucial for handling small tools and intricate components involved in electrical work. The ability to lift and move heavy equipment of at least 50 lbs, as well as the stamina to stand, crouch, or kneel for prolonged periods, is essential, reflecting the physical nature of the job. Visual acuity is another key requirement, as students must be capable of reading detailed schematics,

identifying wire colors, and performing precise tasks, whether with or without corrective lenses. Moreover, flexibility and mobility are crucial, as electrical work often involves accessing and operating in various spaces, including confined areas like crawl spaces or elevated heights. Fine motor skills are imperative for handling delicate tasks, such as intricate wiring. Additionally, students must have the ability to distinguish between different colors, a critical aspect for safety and accuracy in dealing with electrical wiring. Lastly, a strong awareness of safety practices is necessary to navigate the potential hazards inherent in electrical work. Together, these physical requirements ensure that students are well-prepared to meet the demands of a career as a residential electrician.

### Program Length

3 quarters

### Admission Dates:

Fall, Winter, Spring, Summer

### Program prerequisites

Prerequisite(s)

Students have to successfully complete the first quarter courses, including CONST 102, CONST 104, CONST 106 and CONST 144.

### Program Course List

CONST 115	Safety and Circuit Design: Materials and Requirements in Residential Electrical Systems	5
CONST 124	Principles of Residential Electrical Rough-In	5
CONST 131	Residential Electrical Design: Load Calculations and Applications	5
CONST 151	NEC Proficiency: Comprehensive Guide to National Electrical Code	5
CONST 165	Trim-Out Procedures in Residential Electrical Systems	5
CONST 203	Residential Electrical Diagnostics: A Course on Troubleshooting	5
CONST 207	Residential Renewable Energy: Solar Power, Battery Backup, and EV Charging	5

CONST 213	Electrical Service Installation: Principles and Practice	5
CONST 217	Grounding and Bonding: From Theory to Practice	5

**Subtotal: 45**

## Residential Plumbing Certificate

The Residential Plumbing Certificate is a comprehensive 45-credit program designed for individuals aiming to begin a career in the plumbing industry or to enhance their current skills in residential plumbing. The curriculum is structured to provide a blend of theoretical knowledge and practical training, ensuring students are well-prepared for real-world scenarios. Core courses cover topics such as the fundamentals of plumbing, water supply, drainage systems, and plumbing fixtures installation. Advanced modules delve into areas like blueprint reading, plumbing codes and standards, and energy-efficient plumbing solutions.

Hands-on training forms a significant part of the program, offering students the opportunity to work with various plumbing materials and tools under the guidance of experienced instructors. This practical aspect is vital in developing the skills needed to install, repair, and maintain plumbing systems in residential settings. Safety training is also emphasized to ensure compliance with industry standards and practices.

Beyond technical skills, the program includes courses on customer service and business operations, equipping students with the knowledge to manage plumbing projects or even start their own plumbing business. Upon completion of the program, graduates will have the skills and qualifications to pursue roles such as plumbing technicians, contractors, or consultants in the residential sector. The certificate also serves as a stepping stone for those wishing to pursue further education or specialized certifications in the plumbing field.

### Physical Requirements

The Residential Plumbing Certificate demands a set of physical requirements vital for success in the field. Firstly, students must possess good hand-eye coordination and manual dexterity, crucial for handling small tools and intricate components involved in plumbing work. The ability to lift and move heavy equipment of at least 50 lbs, as well as the stamina to stand, crouch, or kneel for prolonged periods, is essential, reflecting the physical nature of the job. Visual acuity is another key requirement, as students must be capable of reading detailed schematics

and performing precise tasks, whether with or without corrective lenses. Moreover, flexibility and mobility are crucial, as plumbing work often involves accessing and operating in various spaces including confined areas like crawl spaces. Lastly, a strong awareness of safety practices is necessary to navigate the potential hazards inherent in plumbing.

### Program Length:

3 quarters

### Admission Dates:

Fall, Winter, Spring, Summer

### Completion Requirements

#### Prerequisite(s)

Students must have successfully completed the first quarter courses, including CONST 102, 104, 106 and 144.

#### Program Course List

CONST 113	Introduction to Plumbing	5
CONST 118	Diagrams and Blue Prints	5
CONST 132	Plumbing Pipes and Fixtures	5
CONST 147	Drains and Vents	5
CONST 201	Septic Tanks and Sewer Lines	5
CONST 205	Water Pipes and Water Heaters	5
CONST 208	Whirlpool Bath and Toilets	5
CONST 211	Natural Gas Piping	5
CONST 215	Pools and Hot Tubs	5

**Subtotal: 45**

## Cosmetology

### Cosmetology Associate of Applied Technology Degree

Educating students in all aspects of professional cosmetology and hair design. Providing services to the hair, head, neck, or scalp. It includes conditioning treatments, haircutting, hairstyling, hair coloring, chemical texturizing services, and skin and nail care. Successful graduates are prepared for the Washington State Department of Licensing Cosmetology examination, and upon licensure will be qualified for positions as cosmetologists. Students will participate in realistic training in the student-operated salon. Clover Park

Technical College uses an interactive system of training, utilizing hands-on applications, as well as up to 25 percent online training to support student learning. This model is considered a world leader in beauty education and provides innovative, high-quality educational systems that promote excellence in the hair and beauty industry.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

### Employability Requirements

To qualify for a cosmetologist license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program options and pass both the written and practical examinations required by the Washington Department of Licensing.

### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Day Program: Summer, fall, winter, and spring quarters.

### Accreditation

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Washington State Department of Licensing.

### Mailing Address:

Professional Licensing Support Services  
Department of Licensing  
PO BOX 9026  
Olympia, WA 98507-9026  
Phone: 360-664-6645  
Email: plssunit@dol.wa.gov

### Program Note

COSMO 183, 189 and 233 will only be offered in the Fall and Spring quarters.

### Program Outcomes

- Generate salon-quality hair services to industry standards.
- Apply infection control principles, practices, and safety as mandated by state regulations.
- Develop a plan for successful business principles.
- Analyze client expectations during a consultation in the context of cosmetology art and science principles.
- Summarize the test standards and information in order to pass Washington State board examination for licensure.

### Completion Requirements

#### Prerequisite(s)

Students must be at least 16 years of age to start earning hours towards the Washington State education requirements. A mandatory orientation is required prior to admission to the program.

#### Program Course List

COSMO 112	Infection Control Principles & Practices	2
COSMO 117	Trichology	4
COSMO 137	Application of Haircutting, Hairstyling, and Thermal Styling	13
COSMO 146	Chemical Texture Services	5
COSMO 147	Wet Styling and Long Hair Design	5
COSMO 159	Lab Clinic I	7
COSMO 163	Lab Clinic II	9
COSMO 167	General Science of Hair Coloring	6
COSMO 172	Lab Clinic III	10
COSMO 175	Cosmetology Salon Business Practices	3
COSMO 181	Artificial Hair	2
COSMO 183	General Science of Nails	7
COSMO 189	General Science of Skin	7
COSMO 226	Advanced Hair Coloring	8
COSMO 232	State Board Practical Preparation	6
COSMO 233	Lab Clinic V	6
COSMO 234	Lab Clinic IV	9
COSMO 237	State Board Written Test Review	2
COSMO 245CAP	Cosmetology Capstone	2
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
MAT 111	Math for Cosmetology/Esthetics	5

	Professionals		
	Or		
	100-level math class	5	
PSYC& 100DIV	General Psychology	5	
	Or		
SOC& 101DIV	Introduction to Sociology	5	
	Or		
PSY 112DIV	Psychology of the Workplace	5	
COLL 102	College Success for All	3	
	Computer Literacy Requirement	3	
	<b>Subtotal: 128-134</b>		

*NOTE:*

*MAT 111: preferred*

*Computer Literacy Requirements: Computer Literacy Course that meets the degree requirement, or successfully pass the computer literacy exam.*

*COSMO 233 is an optional course.*

Students not meeting state licensure hours requirements will take one or more of the following internship courses:

COSMO 248	Internship I	1
COSMO 250	Internship II	2
COSMO 252	Internship III	3
COSMO 254	Internship IV	4
COSMO 256	Internship V	5

## Hair Design Associate of Applied Technology Degree

Educating students in all aspects of professional hair design. Providing services to the hair, head, neck or scalp. It includes conditioning treatments, haircutting, hairstyling, hair coloring, and chemical texturizing. Successful graduates are prepared for the Washington State Department of Licensing Hair Designer examination, and upon licensure will be qualified for positions as hair designers. Students will participate in realistic training in the student-operated salon. Clover Park Technical College uses an interactive system of training, utilizing hands-on applications as well as up to 25 percent online training to support student learning. This model is considered a world leader in beauty education and provides innovative, high-quality educational systems that promote excellence in the hair and beauty industry.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), social sciences (psychology, sociology), and COLL 102 that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The hair design license has been available in Washington State since 2016, and was developed for those wanting to specialize in hair design. This differs from the Cosmetology license, which also includes the ability to provide nail or skin care such as waxing, facials, manicuring and pedicures. Hair designers may return for the skin and nail care quarter. If a student does return to complete the skin and nail care courses, they will need to retest and pass the Washington State Department of Licensing written and practical examinations to receive the cosmetology licensure.

### Employability Requirements

To qualify for a cosmetologist license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program options and pass both the written and practical examinations required by the Washington Department of Licensing

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Day Program: Summer, fall, winter, and spring quarters.

### Accreditation

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Washington State Department of Licensing.

### Mailing Address:

Professional Licensing Support Services  
 Department of Licensing  
 PO BOX 9026  
 Olympia, WA 98507-9026  
 Phone: 360-664-6645  
 Email: plssunit@dol.wa.gov

**Program Outcomes**

- Demonstrate proficiency in salon-quality hair services, including shampoo/condition, hair design, hair cutting, chemical texture services, hair coloring, and artificial hair.
- Follow effective protocols of infection control, hygiene, and safety, according to state laws.
- Complete and pass all courses offered in curriculum with a passing grade of 75 percent or better to achieve AAT degree.
- Develop strategies for a successful salon business.
- Apply science and art of beautifying and improving hair.
- Show skills and preparedness for WA State practical and written examinations for licensure.

**Completion Requirements****Prerequisite(s)**

Students must be at least 16 years of age to start earning hours towards the Washington State education requirements. A mandatory orientation is required prior to admission to the program.

**Program Course List**

COSMO 112	Infection Control Principles & Practices	2
COSMO 117	Trichology	4
COSMO 137	Application of Haircutting, Hairstyling, and Thermal Styling	13
COSMO 146	Chemical Texture Services	5
COSMO 147	Wet Styling and Long Hair Design	5
COSMO 159	Lab Clinic I	7
COSMO 163	Lab Clinic II	9
COSMO 167	General Science of Hair Coloring	6
COSMO 172	Lab Clinic III	10
COSMO 175	Cosmetology Salon Business Practices	3
COSMO 181	Artificial Hair	2
COSMO 226	Advanced Hair Coloring	8
COSMO 232	State Board Practical Preparation	6
COSMO 234	Lab Clinic IV	9
COSMO 237	State Board Written Test Review	2
COSMO 245CAP	Cosmetology Capstone	2
ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5

MAT 111	Math for Cosmetology/Esthetics Professionals Or Any 100-Level Math Class	5 5
PSYC& 100DIV	General Psychology Or	5
SOC& 101DIV	Introduction to Sociology Or	5
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All Computer Literacy Requirement	3 3
<b>Subtotal: 114-119</b>		

*NOTE:*

*MAT 111: preferred*

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

Students not meeting state licensure hours requirements will take one or more of the following internship courses:

COSMO 248	Internship I	1
COSMO 250	Internship II	2
COSMO 252	Internship III	3
COSMO 254	Internship IV	4
COSMO 256	Internship V	5

**Culinary Arts****Culinary Arts Associate of Applied Technology Degree**

Graduates are prepared to enter the fast-paced and exciting culinary field as entry-level cooks, lead cooks, or kitchen station supervisors.

Emphasizes fine-dining food production skills combined with professional service training and food-management techniques. Food production courses emphasize quality food preparation.

Potential employers include fine-dining establishments, hotels, resorts, catering kitchens, clubs, and executive dining services. In combination with additional study and experience, this degree can place graduates on a career ladder that could lead to positions such as restaurant manager, catering/banquet manager, sous-chef and

executive chef.

Students train in aspects of culinary arts food service operations and management. The program emphasizes preparation of food for healthy lifestyles and is designed to exceed the standards set by the American Culinary Federation and the National Restaurant Association's Professional Management Development Program. The program combines classroom study and work-site learning in college restaurant operations.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

This program is a combination of online, classroom, and practical experience in our on-campus restaurant. This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements. In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
CUL 110	Restaurant Cooking I	5
CUL 111	Food Preparation I	3
CUL 113	Introduction to Baking	3
CUL 119	Food Preparation II	3
CUL 124	Restaurant Cooking II	5
CUL 132	American Regional Cuisine	3

CUL 135	Food Preparation III (Meat Fabrication)	3
CUL 140	Restaurant Cooking III	5
CUL 145	Kitchen Equipment and Flavorings	2
CUL 150	Breakfast and Dairy	3
CUL 155	Charcuterie	3
CUL 160	Meat Cookery	3
CUL 165	Salads and Appetizers	3
CUL 168	Soups and Sandwiches	3
CUL 170	Stocks and Sauces	3
CUL 175	Menu Design	3
RBM 107	Marketing	3
REST 103	Food & Beverage Cost Control	4
REST 107CAP	Kitchen & Dining Management	3
REST 113	Restaurant Dining & Customer Service	5
REST 119	Operations Management	4
REST 124	Restaurant Bookkeeping	4
REST 133	Beverage Service Management	4
COLL 102	College Success for All	3
	100-level math class	5
CMST& 220	Public Speaking	5
	Or	
ENGL& 101	English Composition I	5
	Computer Literacy Requirement	3
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5

**Subtotal: 104**

**Basic Cooking Skills Certificate**

Designed to train students in the use of equipment used in a professional kitchen, use and care of cooking knives, and basic cooking skills. These skills include choosing ingredients, flavorings, preparation and presentation of such items as stocks, sauces, salads, appetizers, sandwiches, and breakfast foods. Upon completion, student will have the skills to work as a prep or line cook in a restaurant.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
CUL 110	Restaurant Cooking I	5
CUL 111	Food Preparation I	3
CUL 113	Introduction to Baking	3
CUL 119	Food Preparation II	3
CUL 124	Restaurant Cooking II	5
CUL 140	Restaurant Cooking III	5
CUL 145	Kitchen Equipment and Flavorings	2
CUL 150	Breakfast and Dairy	3
CUL 165	Salads and Appetizers	3
CUL 168	Soups and Sandwiches	3
CUL 170	Stocks and Sauces	3
COLL 102	College Success for All	3
<b>Subtotal: 44</b>		

**Culinary Advanced Cooking Certificate**

Designed to build upon the skills learned in the Basic

Certificate, students will learn to create meals found in high-end restaurants as the management skills that are crucial for success. Skills learned include the selection and preparation of quality meat products, Charcuterie, and regional cuisine; cost control, menu design, marketing and management. Upon completion, students will have the skills to pursue work as a sous chef or executive chef.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters, based on availability.

**Completion Requirements**

**Prerequisite(s)**

Completion of Basic Cooking Skills Certificate

**Program Course List**

CUL 132	American Regional Cuisine	3
CUL 135	Food Preparation III (Meat Fabrication)	3
CUL 155	Charcuterie	3
CUL 160	Meat Cookery	3
CUL 175	Menu Design	3
RBM 107	Marketing	3
REST 103	Food & Beverage Cost Control	4
REST 107CAP	Kitchen & Dining Management	3
REST 113	Restaurant Dining & Customer Service	5
REST 119	Operations Management	4

REST 124	Restaurant Bookkeeping	4
REST 133	Beverage Service Management	4
<b>Subtotal:</b>		<b>42</b>

## Dental Assistant

### Dental Assistant ADA Accredited Associate of Applied Technology Degree

Designed to prepare students for positions in the dental field, including both front-office and dental-assistant career tracks. Graduates of the program will have a foundation of knowledge of dental sciences, dental assisting skills, dental materials, dental laboratory procedures, radiography, infection control, and dental business office-management skills.

Students will develop an understanding of the role of the dental assistant and dental business office assistant within the dental care team. Graduates are qualified for entry level positions as expanded-duties dental assistants and coordinating assistants, as well as dental business office assistants within a dental office.

This program is accredited through the American Dental Association (ADA). Students will be required to take the three components of the Dental Assistant National Board (DANB) Certification Examination. Successfully completing these exams will result in the student receiving their national certification from DANB, entitling them to use the title of certified dental assistant. Students will not need their CDA to graduate from the program but it is highly encouraged.

Included in this program are academic courses in communication (English composition or speech), quantitative reasoning (math), and social sciences (psychology or sociology) that provide knowledge and abilities upon which technical skills are built and personal development is enhanced. College success and computer literacy courses are also required.

Students are strongly encouraged to carry personal health/medical insurance throughout their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

Apply American Dental Association standards and state and federal law for conduct in a clinical setting. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This

includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

#### Employability Requirements

To be employed as a dental assistant, you must apply for registration and become registered with the Washington Department of Health. You must hold a current and valid Health Care Provider Basic Life Support (BLS) certification. If newly hired, you must obtain the required certification within 45 days of the date hired (WAC 246-817-720).

#### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Fall and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

In order to participate in the program, students must have current immunizations or laboratory verification of immune status. This includes, but is not limited to, Hepatitis B series, including a positive titer, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, Covid 19 and Varicella as required by contracts with clinical facilities and CDC recommendations. Students will be required to get a current Basic Life Support (CPR) card for health care providers, a First Aid card, and a current dental examination form completed by their dentist.

To enter the program, a student must be eligible the first quarter to take MAT 094, college-level English, and psychology or another social science or humanities course.

In order to participate in the externship, students must have all general education requirements completed and receive a "No Record On File" report related to crimes against persons from the Washington State Patrol. Students must be at least 18 years of age and have a high school diploma or high school equivalency diploma (per CODA standards).

#### Program Course List

DAS 104	General Studies	3
DAS 108	Biomedical Sciences	5
DAS 112	Dental Sciences I	4
DAS 114	Dental Assisting Skills I	4



DAS 117	Foundations of Clinical Dentistry	2
DAS 121	Dental Sciences II	2
DAS 123	Dental Assisting Skills II	5
DAS 127	Dental Specialties I	4
DAS 131	Principles of Radiography	6
DAS 133	Certification Review I	2
DAS 207	Dental Sciences III	4
DAS 209	Dental Assisting Skills III	5
DAS 213	Dental Specialties II	5
DAS 225	Clinical Experience III	6
DAS 215	Certification Review II	2
DAS 218	Clinical Experience I	2
DAS 220CAP	Clinical Experience II	6
DAS 230	Certification Review III	2
DBOA 103	Dental Terminology & Procedures	4
DBOA 111	Dental Charting, Scheduling and Recall Management	5
DBOA 119	Dental Documents and Inventory Systems	4
DBOA 135	Dentrix Advanced Training	2
ENGL& 101	English Composition I Or Public Speaking Any 100-Level Math Class	5 5 5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All Computer Literacy Requirement	3 3

**Subtotal: 105**

*Dental Assistant Computer Literacy Course Options: See list below*

#### Computer Literacy Course Options

CAS 115CL	Introduction to Computing	3
CAS 121CL	Word I	3
CAS 125CL	Word II	3
CAS 130CL	Excel I	3
CAS 135CL	Excel II	3
CAS 141CL	PowerPoint	3
CAS 145CL	Publisher	5
CAH 105CL	Computer Applications	5

## Dental Sterilization Certificate

### Dental Sterilization Certificate for High School

This certificate is designed for high school students to develop skills needed for an entry level position in a dental office and will introduce the students to Microbiology,

Infection Control, Sterilization, Management of Hazardous Materials, and Ergonomics.

It will also provide information of the dental profession, ethics, and jurisprudence, dental terminology, diversity, and preparing for patient care. Students will also learn to correctly recognize and identify various occupations within the dental environment.

Students will study basic dental terminology necessary to complete all other courses. Information provided to accurately identify the names and numbers of teeth in the primary and permanent dentition, and dental treatment descriptions. You will study the principles and laws related to patient privacy and the causes and treatment for HIV/AIDS.

Students that complete the certificate in high school will receive credit at the college that will count towards the AAT in Dental Assistant.

#### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Fall and spring quarters.

#### Completion Requirements

Prerequisite(s)

Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

In order to participate in the clinical aspects of the program the student must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol and meet the requirements for the facility that they may be assigned to.

#### Program Course List

DBOA 103	Dental Terminology & Procedures	4
DAS 104	General Studies	3
DAS 108	Biomedical Sciences	5

**Subtotal: 12**

## Digital Entertainment Design and Production

### Digital Entertainment Design and Production Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Digital Entertainment Design and Production is a multidisciplinary subject combining art, computer science, and communications elements. If it is on a screen, we are the ones who put it there. From videos and commercials to ads and games, today’s world is run by media.

The Clover Park Digital Entertainment Design and Production degree provides students with fundamental skills that apply to careers in film or game design. We do this by giving the students a foundation in basic art and design skills before proceeding to the medium of their choice. Whether that medium is games or film, students begin building skill sets that allow them the type of self-expression that makes a portfolio stand apart.

This program prepares students for a wide variety of career options, including production assistant, digital photographer, digital editor, digital effects artist, animator, video game developer, video game tester, level designer, and 3D artist.

#### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Fall and spring quarters. This is an afternoon program.

#### Completion Requirements

Prerequisite(s)

Enrollment in or successful completion of ENG 091.

#### Program Course List

DED 102	Genre Studies	3
DED 105	General Art	3
DED 107	Digital Art I	3
DED 108	Screenwriting	3
DED 114	Digital Art II	3
DED 117	Introduction to Video and Game Creation	4

DED 130	Storyboarding	3
DED 137	Motion Graphics I	3
DED 138	Advanced Development Tools	4
DED 139	Video and Game Creation I – Basic Production Tools	4
DED 149	3D Modeling I	3
DED 151	Video and Game Creation II – Visual Design Tools	4
DED 153	Motion Graphics II	3
DED 155	Video and Game Creation III – Intermediate Production Tools	4
DED 157	3D Modeling II	3
DED 165	Video and Game Creation IV – Advanced Production Tools	4
DED 169	Video and Game Creation V – Advanced Design Theories	4
DED 173	3D Animation	3
DED 176	3D Modeling III	3
DED 177	Digital Photography	3
DED 181	Entertainment Philosophy	3
DED 184	Interactivity Guidance	3
DED 270	Development Project	3
	Or	
DED 275	Internship	3
DED 280	Portfolio Creation	3
	CAP	

**Subtotal: 79**

#### AAT Degree Requirements

Technical Course Requirements	79
AAT General Education Requirements	18

**Subtotal: 97**

AAT Degree General Education Requirements: See list below

#### AAS-T Degree Requirements

Technical Course Requirements	79
AAS-T Degree General Education Requirements	23

**Subtotal: 102**

AAS-T Degree General Education Requirements: See list below

#### General Degree Requirements

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below:

## AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

## AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

## 5 credits in communication

ENGL& 101	English Composition I	5
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## 5 credits in quantitative reasoning

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

## 5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
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## 5 credits in social science, humanities, or science; choose one from the following

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5

PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

## 3 credits in College Success

COLL 102	College Success for All	3
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## Early Care and Education

## Early Care and Education Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for careers in the Early Care & Education field as child care directors, teachers, leads, and assistant child care providers.

To obtain the degree, a student must complete the required courses and elective credits. Students participate in practicum experiences at the Hayes Child Development Center on the Lakewood Campus or in an approved local early learning program.

Students will complete four practicum experiences. The fourth practicum will be in an area of the student's choice: Leadership in ECE; Child Development – Infant/Toddler; Child Development – School Age; Family Childcare Professional; or Special Needs. Degree candidates may petition for credits based on possession of a current CDA credential.

Students are required to develop a program portfolio to be completed and presented prior to graduation.

All courses must be completed with a minimum of a "C" grade to graduate. The Washington State ECE Stackable Certificate is embedded in the degree program, so students may earn stepping-stone credentials on their way to completing an associate degree.

Proficiency in reading, writing, and an understanding of the English language are required. ENGL& 101 must be completed by the end of the fourth quarter. Students are required to take the Accuplacer assessment or equivalent before entry into the program and must meet with an ECE faculty advisor. All degree students must fulfill portfolio requirements, which must be completed by the time of graduation from the program.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Employability Requirements**

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.

**Program Length**

This program is approximately 6 quarters long, depending on the time students need to satisfactorily complete all graduation requirements and hours of enrollment. All courses must be completed with a minimum of a “C” grade to graduate.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

none

**Program Course List**

ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety & Nutrition	5
EDUC& 115	Child Development	5
ECS 119	Computer Essentials for ECE	3
ECS 151	ECE Curriculum: Math, Science & Technology	3
ECS 161	ECE Curriculum Music, Movement, and Creativity	3
ECS 178	Practicum: Environments	5
ECS 185	Practicum: Domains of Development	5
EDUC& 130	Guiding Behavior	3
EDUC& 150	Child, Family and Community	3
ECED& 132	Infants & Toddlers - Nurturing Care	3
ECED& 160	Curriculum Development	5
ECED& 170	Environments for Young Children	3
ECED& 180	Language and Literacy Development	3

ECED& 190	Observation and Assessment	3
ECE 230	Inclusion In Ece	3
ECE 245DIV	Diversity Awareness & Curriculum Development	3
ECS 277	Professionalism & Ethics	2
ECE 290CAP	Portfolio Adventure	2
ECE 292	Theories of Child Development	3
ECE	Electives	4
ECE	Specialization Elective	3

**Subtotal: 77**

*ECE Practicum: Specialization choices: See list below (3 credits)*

*ECE Electives: See list below (4 credits)*

**AAT Degree Requirements**

Technical Course Requirements	77
ECE AAT General Education Requirements	18

**Subtotal: 95**

ECE AAS-T Degree General Education Requirements: See list below

**AAS-T Degree Requirements**

Technical Course Requirements	77
AAS-T Degree General Education Requirements	23

**Subtotal: 100**

AAS-T Degree General Education Requirements: See list below

**ECE Practicum:Specialization choices**

(Students must choose one of the following Practicum:Specializaion Courses)

ECE 195	Practicum Specialization: Emotionally Intelligent Child	3
ECE 217	Practicum Specialization: Infant/Toddler	3
ECE 220	Practicum Specialization: Responsive Caregiving for Infants & Toddlers	3
ECE 231	Practicum Specialization: School Age	3
ECE 286	Practicum Specialization: Leadership	3
ECE 287	Practicum Specialization: Child Development	3
ECE 288	Practicum Specialization:	3

ECE 297	Family Child Care Professional Practicum Specialization: Special Needs	3
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## ECE Electives

(Students must complete a minimum of 6 elective credits)

ECE 126	Nature and the Outdoor Classroom	2
ECED& 120	Practicum: Nurturing Relationships	2
EDUC& 136	School Age Care Management	3
ECED& 139	Administration of Early Learning Programs	3
ECS 221	Curriculum & Environments for School Age Programs	3
ECS 260	Curriculum for Family Child Care	2
ECS 266	Leadership in Early Childhood	4
ECS 290	Mentoring In ECE	1
ECED& 134	Family Child Care	3

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
MAT 103	Business Mathematics	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*PSYC& 100DIV General Psychology (PSY 112DIV, SOC& 101DIV, or other social science or humanities course that meets the diversity requirement)*

*Note:*

*CMST& 220 or higher*

*MAT 103 or higher*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

## 5 credits in communication

ENGL& 101	English Composition I	5
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## 5 credits in quantitative reasoning

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

## 5 credits in a social science that meets the diversity requirement

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

## 5 credits in social science, humanities, or science

Per program and industry outcomes suggested options: Soc & 100 Sociology or ASL & 21 American Sign Language

## Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5

POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5
3 credits in College Success		
COLL 102	College Success for All	3

**Subtotal: 18**

## Early Childhood Leadership Certificate

Designed for experienced Early Care & Education teachers seeking leadership positions in their career field. Classes are offered in the evenings with arranged practicum experience.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately two-to-four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a “C” grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 091 or equivalent.

#### Program Course List

ECED& 139	Administration of Early Learning Programs	3
ECS 235	Issues & Trends	2
ECS 266	Leadership in Early Childhood	4
ECS 277	Professionalism & Ethics	2
ECE 286	Practicum Specialization: Leadership	3
ECS 290	Mentoring In ECE	1
EDUC& 150	Child, Family and Community	3

## Special Needs Certificate

Designed for experienced Early Care & Education teachers who are eager to increase their skill in working with children of all abilities. Explores the many facets of leadership positions, how to lead staff, and how to advocate for the needs of young children. Classes are offered in the evenings with an arranged practicum experience.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a “C” grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Successful completion of ENG 091 or equivalent. Students are required to take the Accuplacer assessment or equivalent before entry into the program. ASL& 121 American Sign Language & ASL & 122 American Sign Language 2 require college-level English.

#### Program Course List

EDUC& 115	Child Development	5
EDUC& 130	Guiding Behavior	3
EDUC& 150	Child, Family and Community	3
ECED& 190	Observation and Assessment	3
ECE 230	Inclusion In Ece	3
ECE 297	Practicum Specialization: Special Needs	3
ECS 235	Issues & Trends	2
ECS 277	Professionalism & Ethics	2
COLL 102	College Success for All	3

ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
<b>Subtotal: 37</b>		

## State Initial Early Childhood Education Certificate Step 1: Washington State ECE Stackable Certificate

Students can earn this certificate as the starting point of their careers or to continue their professional development. The certificate focuses on competencies comparable to those of the Child Development Associate (CDA). This provides the foundation for the ECE State Certificate and associate degree. Courses include a 5-credit Introduction to Early Childhood Education; a 5-credit Health, Safety, and Nutrition course; and a 2-credit practicum to apply learning.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

To become a licensed child care provider in Washington, you must participate in a Department of Early Learning (DEL) licensing orientation and apply for and receive licensure. State law requires DEL to run background checks on anyone who is authorized to care for or has unsupervised access to children in licensed child care facilities.

### Admission Dates

Fall quarter.

### Completion Requirements

#### Prerequisite(s)

ECED& 100: Child Care Basics (STARS) or equivalent. Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

#### Program Course List

ECED& 105	Introduction to Early	5
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	Childhood Education	
ECED& 107	Health, Safety & Nutrition	5
ECED& 120	Practicum: Nurturing Relationships	2

**Subtotal: 12**

*ECED& 107: Articulated courses with high schools for dual enrollment*

## Short ECE Certificate Of Specialization Certificate Step 2: Washington State ECE Stackable Certificate (Initial Certificate Plus the Following Requirements)

This certificate builds on the Initial Certificate (for a total of 37 credits). At this point, professionals can choose one of five specializations: ECE general, infant-toddler care, school-age care, family child care, and ECE administration. For each specialization, students must take a 5-credit Child Development course, plus a course aligned with the specific specialization.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

Courses from Initial Certificate		
ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety & Nutrition	5
ECED& 120	Practicum: Nurturing Relationships	2
Program Course List		
EDUC& 115	Child Development	5
ECE	Specialization Elective	3
		<b>Subtotal: 20</b>

*ECE Specialization Elective: See list below*

**Note: Articulated courses with high schools for dual enrollment**

**ECE Specialization Elective**

Students must choose one of the following:

ECED& 132	Infants & Toddlers - Nurturing Care	3
ECED& 139	Administration of Early Learning Programs	3
EDUC& 130	Guiding Behavior	3
EDUC& 136	School Age Care Management	3
ECED& 134	Family Child Care	3

## Washington State ECE Stackable Certificate

Prepares students for careers in the Early Care & Education field as lead and assistant childcare providers. Students participate in experiential learning at the Hayes Child Development Center on the Lakewood Campus or in approved local child care centers. The entire credential is broken down into three steps (Initial Certificate, Washington State Short Certificate of Specialization, and remaining ECE Washington State Certificate requirements).

The program is designed for students to earn a certificate while working in the field.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities upon which technical skills are built and personal development is enhanced.

### Employability Requirements

To become a licensed child care provider in Washington, you must participate in a Washington State Department of Children, Youth and Families (DCYF) licensing orientation and apply for and receive licensure. State law

requires DCYF to run background checks on anyone who is authorized to care for or who has unsupervised access to children in licensed child care facilities.

### Program Length

This program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements and depending on hours of enrollment. All courses must be completed with a minimum of a "C" grade to graduate.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Proficiency in reading, writing, and understanding the English language is required. Students are required to take the Accuplacer assessment or equivalent before entry into the program. Successful completion of ENG 091 or equivalent.

#### Program Course List

ECED& 105	Introduction to Early Childhood Education	5
ECED& 107	Health, Safety & Nutrition	5
ECED& 120	Practicum: Nurturing Relationships	2
ECED& 160	Curriculum Development	5
ECED& 170	Environments for Young Children	3
ECED& 180	Language and Literacy Development	3
ECED& 190	Observation and Assessment	3
EDUC& 115	Child Development	5
EDUC& 150	Child, Family and Community	3
ECE	Specialization Elective	3
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
		<b>Subtotal: 47</b>

ECE Specialization Elective: See listing below

Note: English Composition or higher

**ECED& 107: Articulated courses with high schools for**



**dual enrollment**

## ECE Specialization Elective

Students must choose one of the following:

ECED& 132	Infants & Toddlers - Nurturing Care	3
ECED& 139	Administration of Early Learning Programs	3
EDUC& 130	Guiding Behavior	3
EDUC& 136	School Age Care Management	3
ECED& 134	Family Child Care	3

## Electrician Low Voltage Fire/ Security

### Electrician Low Voltage Fire/Security Associate of Applied Technology Degree

Prepares students for positions in the electronic fire/security industry as low voltage electrician apprentices, service technicians, or installers.

Students participate in hands-on training with advanced equipment, techniques, and programming related to burglar alarms, fire alarms, card access, and closed-circuit TV. The program prepares students for careers as alarm-system installers and service technicians.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The Electrician Low Voltage Fire/Security Degree Program is approved as a Limited Energy (06) specialty electrical training program in the state of Washington. Upon successful completion of the program, graduates applying to become a Limited Energy (06) specialty electrician can be credited with 1,815 hours of work experience.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project. Students are required to pass seven nationally recognized certification exams during the program. All technical courses must be completed with a minimum "C" grade to receive the degree.

**Program Length**

This degree program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring, and summer quarters.

**Program Outcomes**

- Apply industrial safety standards at all times.
- Design an energized system to the specifications of the National Electrical Code.
- Produce a blueprint of a fire/security system including its wiring diagram.
- Construct a functioning security alarm system.
- Construct a functioning closed-circuit television system.
- Construct a functioning fire alarm system.
- Integrate biometric devices into existing systems.

**Completion Requirements****Prerequisite(s)**

Successful completion of the Electrician Low Voltage Fire/Security certificate, or by instructor's permission.

**Program Course List**

EFS 105	AC/DC Electricity: Basic Theory, Fractions & Ohm's Law	7
EFS 106	AC/DC Electricity: Series Parallel & Combination Circuits	7
EFS 107	AC/DC Electricity: Electrical Power & Power Applications	7
EFS 108	National Electrical Code Print Reading	7
EFS 109	National Alarm Installer Training Program	7
EFS 110	CCTV Application & Design	7
EFS 118	National Electrical Codes	6
EFS 119	National Fire Codes	6
EFS 121	CCTV Field Service & Installation	7
EFS 124	Washington Administrative Codes	2
EFS 207	Addressable Fire SLC Systems/Design	7
EFS 211	Biometrics Access	7
EFS 216	Advanced Voice Evacuation Fire Alarm Systems	7
EFS 221	Fire Codes, NICET, NFPA	7
EFS 226	High Security Structured	7

EFS 231CAP	Cabling CCTV Digital Network Solutions	7
		<b>Subtotal: 105</b>

AAT Degree Requirements		
Technical Course Requirements		105
AAT General Education Requirements		18
Computer Literacy		3
		<b>Subtotal: 126</b>

AAT Degree General Education Requirements: See list below

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**General Degree Requirements**

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking  Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology  Or	5
PSY 112DIV	Psychology of the Workplace Or	5
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3

**Electrician Low Voltage Fire/Security Certificate**

Prepares students for positions as low voltage electrician apprentices specializing in the electronic fire/security industry as alarm-system installers and service technicians. Students participate in realistic hands-on training in the classroom on burglar alarms, fire alarms, card access, and closed-circuit TV.

Included in this program are academic courses in communication (English composition, speech),

quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

The Electrician Low Voltage Fire/Security Certificate Program is approved as a Limited Energy (06) specialty electrical training program in the State of Washington.

Upon successful completion of the program, graduates applying to become a Limited Energy (06) specialty electrician can be credited with 1,089 hours of work experience.

All technical courses must be completed with a minimum "C" grade to receive the certificate.

**Program Length**

This certificate program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

EFS 105	AC/DC Electricity: Basic Theory, Fractions & Ohm's Law	7
EFS 106	AC/DC Electricity: Series Parallel & Combination Circuits	7
EFS 107	AC/DC Electricity: Electrical Power & Power Applications	7
EFS 108	National Electrical Code Print Reading	7
EFS 109	National Alarm Installer Training Program	7
EFS 110	CCTV Application & Design	7
EFS 118	National Electrical Codes	6
EFS 119	National Fire Codes	6
EFS 121	CCTV Field Service & Installation	7
EFS 124	Washington Administrative Codes	2
CMST& 220	Public Speaking Any 100-Level Math Class	5

PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
<b>Subtotal: 81</b>		

Direct Transfer Associate degree or equivalent from a regionally accredited institution with an overall minimum 2.3 GPA **OR**

## Environmental Sciences and Technology

### Bachelor of Applied Sciences in Environmental Sciences

CPTC's Bachelor of Applied Science in Environmental Sciences (BAS-ENV) degree has been designed for those pursuing employment as an environmental technician, biological technician, or natural resources technician. The program is also intended to provide advancement opportunities for those currently employed in an environmental field who lack the required credential for that advancement. Graduates with a technical associate degree wanting to advance their career options in environmental sciences are welcome to apply.

BAS-ENV provides the necessary knowledge and skills for a wide range of positions in the environmental science field. As an applied science curriculum, we approach learning environmental sciences using hands-on tools in a realistic, practical context. Students will graduate with experience using ecological and chemical principles and concepts as well as regulatory criteria in solving real-world environmental issues. Graduates will be able to apply quality management to environmental programs and have a foundation in workplace health and safety.

#### Program length

A full-time student would be able to complete the program in 15-18 months (6 quarters). Completion time for part-time students depends on their course load.

#### Admission dates

Summer, fall, winter, and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

#### Admission to the Program

Admission to the program may occur when the following can be documented:

- Successful completion of one of the following:
  - an earned Applied Associate degree, AAS-T,

- an appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.

- 5 college-level credits in English Composition (ENGL& 101 or higher with a minimum grade of 2.0.)
- 5 college-level credits of MATH& 146 Intro to Statistics, or higher level statistics course -or- MATH& 141 Precalculus I or higher level calculus course with a minimum grade of 2.0 (or equivalent)
- 5 college-level credits in a transferable social science course.
- 15 credits in a natural science with a lab component - GEOL& 110 recommended or other earth science with a lab; ENV 164 General Chemistry w/lab, or other equivalent chemistry course with a lab; ENV 165 Environmental Chemistry w/lab, or CHEM& 121 or other equivalent chemistry course with a lab.

#### Admission to the Senior Year

Once admitted to the program, the following must be documented before students can move on to the senior year of the program:

- 5 credits of MATH& 146 or another higher-level statistics class.
- 5 credits of soil science, ENV 260 or equivalent.
- 5 credits of urban environmental science, ENV 231 or equivalent or instructor permission.
- 8 credits of hazardous waste site operations and emergency response, ENV 135 or equivalent with instructor permission.
- 7 credits of critical areas ENV 251 or equivalent.

These requirements can be satisfied by coursework completed before admission to the BAS-ENV program, or during "bridge" courses included within the BAS-ENV program. The bridge courses may include up to 30 credits as required. Bridge courses may be taken concurrently with upper-level BAS classes.

**Second Baccalaureate Degree General Education Requirements**

Applicants who have already earned a baccalaureate degree from an accredited college or university may be able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

Students must still complete program-specific general education degree requirements if not otherwise satisfied. The program-specific general education requirements in the BAS-ENV degree are listed below:

- Life Sciences (e.g., BIOL& 160 General Biology)
- BUS 310 Project Management (or equivalent)
- MAT 311 Mathematical Techniques for Operations Management (or equivalent)
- MAT 413 Measurement and Statistical Process Control (or equivalent)

**Program Course List**

MAT 311	Mathematical Techniques for Operations Management	5
MAT 413	Measurement and Statistical Process Control	5
OPM 313	Quality Management	5
OPM 412	Workplace Health and Safety Management	5
BUS 310	Project Management	5
ENG 310	Business Communications	5
PHIL 310DIV	Professional Ethics	5
PSYC 311DIV	Industrial & Organizational Psychology	5
BIOL& 160	General Biology w/Lab	5
CMST& 220	Public Speaking	5
ENGL& 235	Technical Writing	5
ENV 250	Introduction to Air Pollution	3
GEO 310	GIS Technologies	2
ENV 320	Applications in Environmental Sciences I	5
ENV 410	Applications in Environmental Sciences II	5
ENV 420	Current Issues in Environmental Sciences Seminar	3
ENV 430	NPDES Permitting	5
ENV 440	Environmental Law	5
ENV 450	Internship	7
<b>Subtotal: 90</b>		

**Environmental Sciences & Technology Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

Provides the necessary skills for a wide range of positions in the environmental science field.

Students perform hands-on water-quality monitoring; soil, water, and air sampling; mineral identification; wetland delineation and restoration; geographic information system mapping; and simulated hazardous waste site cleanup operations.

Careers are available in both natural resource conservation and urban/ remediation fields. This program will assist students in preparing for positions with both public and private sector employers. Potential future job titles include environmental technician, natural resource technician, hazardous waste worker, hazardous material handler, fisheries technician, and storm water remediation operator.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**AAT Program Course List**

ENV 108	Introduction to Ecology	5
ENV 135	Hazardous Waste Site Operations	8
ENV 154	Site Characterization	4
ENV 157	Environmental Site Assessment	4
ENV 164	General Chemistry with Lab	5
ENV 165	Environmental Chemistry with Lab	5
ENV 230	Rural Technologies	4

ENV 231	Issues in the Urban Environment	5	ENV 165	Environmental Chemistry with Lab	5
ENV 248	Hydrology	6	ENV 230	Rural Technologies	4
ENV 251	Environmental Critical Areas	7	ENV 231	Issues in the Urban Environment	5
ENV 260	Introduction to Soils	5	ENV 248	Hydrology	6
ENV 261	Watershed Analysis	4	ENV 251	Environmental Critical Areas	7
ENV 270	Hazardous Materials Transportation	3	ENV 260	Introduction to Soils	5
GEOL& 110	Environmental Geology with Lab	5	ENV 261	Watershed Analysis	4
GEO 215	GPS Technologies	2	ENV 270	Hazardous Materials Transportation	3
ENV 240CAP	Internship	10	GEOL& 110	Environmental Geology with Lab	5
ENV 246CAP	Environmental Science Capstone	2	GEO 215	GPS Technologies	2
<b>Subtotal: 84</b>			<b>Subtotal: 72</b>		

### AAT Degree General Education Requirements

In addition to the program course requirements, students must also complete the following general education requirements for the degree they seek to obtain.

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
<b>Subtotal: 18</b>		

### AAT Degree Requirements

Technical Course Requirements	84
AAT General Education Requirements	18

**Subtotal: 102**

### AAS-T Program Course List

ENV 108	Introduction to Ecology	5
ENV 135	Hazardous Waste Site Operations	8
ENV 154	Site Characterization	4
ENV 157	Environmental Site Assessment	4
ENV 164	General Chemistry with Lab	5

### AAS-T Degree General Education Requirements

In addition to the program course requirements, students must also complete the following general education requirements for the degree they seek to obtain.

<b>Subtotal: 18</b>		
5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5
5 credits in a social science that meets the diversity requirement		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5
3 credits in College Success		
COLL 102	College Success for All	3

### AAS-T Degree Requirements

Technical Course Requirements	72
Additional AAS-T General Education Requirements	18

**Subtotal: 90**

# Esthetic Sciences

## Esthetics Certificate

The esthetics certificate program prepares students for entry level positions in salons, day spas. Future skin care professional employment may include positions as skin care specialists, hair removal specialists, spa management, sales or product representatives.

Students participate in realistic training through the student-operated spa on campus. Students perform services on live models. Services performed include facials, temporary hair removal, body wrap techniques, superficial chemical peels, electricity therapies, and microdermabrasion. Curriculum includes all related first aid, safety, and sanitation procedures.

### Employability Requirements

To qualify for an esthetician’s license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program, complete 834 hours of technical instruction, and pass the esthetic written and practical exams for the Department of Licensing.

### Program Length

This program is a combination of online, classroom, laboratory and practical experience in our on-campus spa. It is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Accreditation

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Washington State Department of Licensing.

### Mailing Address:

Professional Licensing Support Services  
 Department of Licensing  
 PO Box 9026  
 Olympia, WA 98507-9026

Phone: 360-664-6645  
 Email: plssunit@dol.wa.gov

### Completion Requirements

### Prerequisite(s)

Students must be at least 16 years of age to start earning hours towards the Washington State education requirements. A mandatory orientation is required before admission to the program.

### Program Course List

ES 160	Beauty Basics	6
ES 162	Diseases & Disorders of the Skin	3
ES 164	Histology & Physiology of the Skin	3
ES 166	Salon Safety & Sanitation	2
ES 168	Temporary Hair Removal	4
ES 170	Anatomy & Physiology for Estheticians	3
ES 172	Basic Body Treatments	2
ES 174	Basic Cosmetic Chemistry	3
ES 176	Facial Procedures	8
ES 178	Herbal & Aromatherapy for Skin Care	2
ES 100	Clinical Applications 1	7
ES 180	Basic Exfoliation	5
ES 182	Career Development & Business Practices	2
ES 184	Machine Facials	4
ES 185	State Board Prep 1	2

**Subtotal: 56**

### General Education requirements

COLL 102	College Success for All	3
CMST& 220	Public Speaking	5
	Or	
ENGL& 101	English Composition I	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
	Any college-level Social Science or Humanities course that meets the diversity requirement	5
MAT 111	Math for Cosmetology/Esthetics Professionals	5

Or  
 Any 100-Level Math Class 5  
**Subtotal: 18**

**Subtotal: 74**

## Master Esthetics Certificate

The master esthetics certificate prepares already licenced estheticians for positions in medical settings such as medi-spas, dermatology offices, or plastic surgery centers. Future skin care professional employment may include positions in medical settings performing laser treatment and medium depth peels under the direction of a physician.

Students participate in realistic training through the student-operated clinic on campus. Students perform services on live models. Services performed include everything under the esthetic license plus medium depth peels. Curriculum includes but is not limited to medium depth peels, laser theory as well as many new devices that are related to the industry. Review will include all related first aid, safety, and sanitation procedures.

### Employability Requirements

To qualify for a master esthetician’s license from the Washington State Department of Licensing, a student must have an active Washington State esthetics license and successfully complete the technical courses offered in the master esthetics certificate program, complete 520 hours of technical instruction, and pass both the advanced esthetics written and advanced practical esthetics exams for the Department of Licensing.

### Program Length

This program is a combination of online, classroom, laboratory and practical experience in our student run clinic on campus. It is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Accreditation

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Washington State Department of

Licensing.

### Mailing Address:

Professional Licensing Support Services  
 Department of Licensing  
 PO Box 9026  
 Olympia, WA 98507-9026  
 Phone: 360-664-6645  
 Email: plssunit@dol.wa.gov

### Master Esthetics Certificate

#### Prerequisite(s)

A student must have an active Washington State esthetics license. A valid active CPR/First Aid/Bloodborne pathogen certificate that remains active for the extent of the program. A mandatory orientation is required before admission to the program.

or

Currently enrolled in the Esthetic Sciences associates degree.

#### Program Course List

ES 200	Clinical Applications 2	9
ES 250	Medical Terminology for Estheticians	2
ES 272	Advanced Body Treatments	3
ES 280	Advanced Exfoliation	4
ES 214	Clinical Applications 4	10
ES 260	Laser Concepts	3
ES 274	Advanced Cosmetic Chemistry	3
ES 286	State Board Prep 3	2

**Subtotal: 36**

## Master Esthetic Sciences - Associate of Applied Technology Degree

The master esthetics program prepares students for entry level positions in salons, day spas, or medical settings such as medi-spas, dermatology offices, or plastic surgery centers. Future skin care professional employment may include positions as estheticians, sales representatives for product lines, or makeup artists.

Students participate in realistic training through the student-operated clinic on campus. Students perform services on live models. Services performed include facials, temporary hair removal, makeup, body wrap techniques, chemical peels, electricity therapies, and microdermabrasion. Curriculum includes all related first aid, safety, and sanitation procedures.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Employability Requirements**

To qualify for an esthetician’s license from the Washington State Department of Licensing, a student must successfully complete the technical courses offered in the program, complete 1,324 hours of technical instruction, and pass all the written and practical exams for the Department of Licensing.

**Program Length**

This program is a combination of online, classroom, laboratory and practical experience in our on-campus spa clinic. It is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Accreditation**

This school is licensed under chapter 18.16 RCW. Inquiries, concerns, or complaints regarding this school can be made to the Washington State Department of Licensing.

**Mailing Address:**

Professional Licensing Support Services  
 Department of Licensing  
 PO Box 9026  
 Olympia, WA 98507-9026  
 Phone: 360-664-6645  
 Email: plssunit@dol.wa.gov

**Completion Requirements**

**Prerequisite(s)**

Students must be at least 16 years of age to start earning hours towards the Washington State education requirements. A mandatory orientation is required before admission to the program.

**Program Course List**

ES 160	Beauty Basics	6
ES 162	Diseases & Disorders of the Skin	3
ES 164	Histology & Physiology of the Skin	3
ES 166	Salon Safety & Sanitation	2
ES 168	Temporary Hair Removal	4
ES 170	Anatomy & Physiology for Estheticians	3
ES 172	Basic Body Treatments	2
ES 174	Basic Cosmetic Chemistry	3
ES 176	Facial Procedures	8
ES 178	Herbal & Aromatherapy for Skin Care	2
ES 100	Clinical Applications 1	7
ES 180	Basic Exfoliation	5
ES 182	Career Development & Business Practices	2
ES 184	Machine Facials	4
ES 200	Clinical Applications 2	9
ES 250	Medical Terminology for Estheticians	2
ES 272	Advanced Body Treatments	3
ES 280	Advanced Exfoliation	4
ES 203	Clinical Applications 3	8
ES 260	Laser Concepts	3
ES 274	Advanced Cosmetic Chemistry	3
ES 285	State Board Prep 2	4

**Subtotal: 90**

*Note: MAT 111: preferred*

<b>General Education Requirements</b>		
COLL 102	College Success for All	3
CMST& 220	Public Speaking	5
	Or	
ENGL& 101	English Composition I	5
MAT 111	Math for Cosmetology/Esthetics Professionals	5
	Or	
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
	Any college-level Social Science or Humanities course that meets the diversity	5



requirement

**Subtotal: 18**

**Subtotal: 108**

## Graphic Design Technology

### Graphic Design Technology - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for careers within the Graphic Communications Industry that includes: Graphic Design, Web design, Digital Marketing, Commercial printing, Sign companies, Specialty printing companies, ePublishing, Screen printing, and Packaging companies.

With rapid technological expansion and broadening of the scope of services provided by the Graphic Communications industry today, companies have expanded services to include creative design, e-commerce, web page design and hosting, mailing, variable data, fulfillment, vehicle wrapping, and a host of services well beyond the core printing model.

Innovations in computer technology continue to rapidly change and expand the field of graphics. Therefore, the following courses of study may be subject to change in order to offer training based on current industry standards.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

#### Program Length

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Fall and spring quarters.

#### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

GTC 120	Computer Operations & Image Management for Graphic	4
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GTC 125	Professionals Introduction to the Principles and Elements of Design	4
GTC 132	Digital Imaging I	4
GTC 137	Electronic Publishing & Layout	4
GTC 145	Prepress I	4
GTC 160	Intro to Vector-Based Illustration Software	4
GTC 165	InDesign I	4
GTC 170	Digital Imaging II	4
GTC 203	Preflight	5
GTC 209	Advanced Vector Digital Illustration	5
GTC 210	Digital Imaging III	5
GTC 220	User Experience Design for the Web	4
GTC 223	Prepress II	5
GTC 225	Advanced Page Layout Principles	5
GTC 230	Intro to Programming for the Web	4
GTC 235	Print Production and Branding	5
GTC 240	Advanced Programming for the Web	4
GTC 254	Capstone Class	5
GTC 276	InDesign II	5
GTC 278	Independent Study	4
GTC 280	Or Internship	4
	<b>Subtotal: 88</b>	

AAT Degree Requirements		
Technical Course Requirements		88
AAT General Education Requirements		18
	<b>Subtotal: 106</b>	

AAT Degree General Education Requirements: See list below

AAS-T Degree Requirements		
Technical Course Requirements		88
AAS-T Degree General Education Requirements		23
	<b>Subtotal: 111</b>	

AAS-T Degree General Education Requirements: See list below

#### General Degree Requirements

In addition to the program course requirements, students

must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5
5 credits in a social science that meets the diversity requirement		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5
5 credits in social science, humanities, or science		
choose one from the following		
ART& 100	Art Appreciation	5

ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
PHYS& 114	General Physics I with Lab	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success		
COLL 102	College Success for All	3

## Health Unit Coordinator

### Health Unit Coordinator Certificate

Health Unit Coordinators are an integral and valuable part of the medical team, providing such services as transcribing physicians' orders, scheduling diagnostic studies and appointments for follow-up care, ordering and maintaining supplies, and maintaining clerical and patient records. This program prepares students for positions as activity coordinators at nursing unit desks. Students will participate in realistic training in the classroom and clinical settings, practicing the responsibilities of the health unit coordinator. Students learn the competencies needed in communications, human relations, anatomy and physiology, medical terminology, health unit coordinator tasks, and unit management. As the communicator for the hospital unit, it is essential that the student has the ability to read, write, understand, and speak English, along with the ability to speak clearly to communicate instructions, directions, and telephone contacts. Health unit coordinators are sometimes referred to as HUC/monitor technicians,

patient access technicians, patient assistance coordinators, administrative support partners, front desk receptionists, or scheduling coordinators.

**Physical Activity Requirements**

It is essential that Health Unit Coordinator students are able to perform a number of physical activities during the clinical portion of the program. This includes walking up and down stairs, lifting 20 lbs. of office supplies, and carrying office supplies and patient charts. Students must also have the ability to sit 75 percent of the time to perform the majority of duties. The clinical experience places students under considerable mental and emotional stress as they undertake responsibilities and duties that impact patients’ lives. Some hospitals may require a drug test before the student is permitted to practice in the hospital. Most clinical sites enforce a no-smoking policy. Smoking at a clinical site may hinder completion of the program.

**Employability Requirements**

High School diploma or equivalent, seven-hour HIV/Blood Borne Pathogens training, pass a criminal background check, current immunizations. Some employers also require drug screens and enforce a no-smoking or nicotine-free environment. Employees must pass a typing test with the ability to type 35 words per minute. Physical requirements can vary by employer. Successful graduates are eligible to take the certification exam by the National Association of Health Unit Coordinators. Persons with some types of criminal convictions may not be eligible for licensure.

**Program Length**

This program is a combination of on-line, classroom, laboratory and clinical experience. It is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Apply legal and ethical aspects of unit coordinating in order to support a medical team.
- Use medical terminology in order to communicate effectively with culturally diverse patients and team members.
- Operate a nursing unit communication system.
- Use computer skills in support of the nursing unit.
- Demonstrate leadership skills necessary for unit management.

**Completion Requirements**

**Prerequisite(s)**

Students must attend mandatory orientation/ advising meeting with instructor. Students are required to display basic computer skills that include, but are not limited to, using email, typing 35 WPM, navigating the Internet, word processing, and inputting data into a spreadsheet and database. Students must obtain a current CPR card for health care providers. In order to participate in the clinical aspect of the program, students must receive during the HUC 108 course a “No Record On File” report from a certified background check related to crimes against persons. A non-refundable fee is charged to each student for the background check. Students must have current immunizations or laboratory verification of immune status. Immunizations could include, but are not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, Varicella, and yearly flu as required by contracts with clinical facilities and CDC recommendations.

Each student is required to carry personal health/medical insurance throughout the program and their clinical rotations. Quarterly-based insurance for students may be purchased; further information is available through the Advising and Counseling Office.

No student will be allowed at clinical sites without proof of insurance, complete immunizations on file, and having successfully passed a drug screen. Proof of immunizations should be submitted the first week of class unless arrangements have been made with the instructor.

Must be a high school graduate or have a high school equivalency diploma by completion of program. Students must be at least 17½ years of age to begin the program.

**Program Course List**

HUC 106	Anatomy & Physiology for Health Unit Coordinator	3
HUC 108	Introduction to Health Unit	6

	Coordinating	
HUC 112	Unit Coordinator Tasks & Procedures II	4
HUC 113	Introduction to Communication in the Health Unit Coordinator Role	1
HUC 114	Unit Coordinator Tasks & Procedures I	7
HUC 118	Advanced Communications in the Health Unit Coordinator Role	2
HUC 120	Unit Management I	3
HUC 122	Unit Management II	3
HUC 126	Legal/Ethical Aspects of Unit Coordinating	2
HUC 132	Clinical Experience	7
HUC 204	Electrocardiogram Monitor Technician	3
COLL 102	College Success for All	3
	<b>Subtotal: 44</b>	

**Highly Recommended Class:**

(This class could be taken while waiting to start the program)

CAS 105	Keyboarding	3
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*NOTE: CAS 105 or Orientation to Computers and MS Office.*

## Heating and Air Conditioning/Refrigeration Service Technician

### HVAC - Associate of Applied Technology Degree

Prepares students for positions in the heating, air conditioning, and refrigeration industry. Graduates will be prepared for entry-level positions as service technicians, building maintenance technicians, equipment assemblers, and start-up residential and light commercial installers. Students will participate in work-based training through realistic training activities on campus.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

This program is approved as an HVAC/Refrigeration (06A) specialty electrical training program in the state of

Washington.

Upon successful completion of the program, graduates applying to become an HVAC/Refrigeration (06A) specialty electrician can be credited with an estimated 960 hours of work experience. This program is not applicable to any other electrical specialty or sub-category.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project. Students are required to pass seven nationally recognized certification exams during the program. All technical courses must be completed with a minimum "C" grade to receive the degree

**Program Length**

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Program Outcomes**

- Employ modern practices used in the industry in order to fix and maintain heating, ventilation, air conditioning, and refrigeration equipment.
- Formulate solutions to common problems associated with heating, ventilation, air conditioning, and refrigeration equipment based on knowledge of traditional theory and formulas.
- Use HVAC/R diagnostic equipment and tools skillfully.
- Use industry safety and environmental standards at all times in the shop.
- Troubleshoot residential, commercial, and industrial heating, ventilation, air conditioning, and refrigeration systems in order to conduct repairs.
- Summarize the test standards and information in order to pass national HVAC/R certification tests.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

HAC 102	Basic Electricity	5
HAC 105	Electrical Circuits	4
HAC 120	Advanced Controls & Troubleshooting	4

HAC 162	Electric Motors & Their Applications	4
HAC 163	Refrigeration Controls	3
HAC 164	Electric Motors & Troubleshooting	3
HAC 169	Advanced Motor Theory	2
HAC 170	Heating I	7
HAC 175	Heating I Lab	5
HAC 181	Heating II	6
HAC 184	Heating II Lab	4
HAC 202	Advanced Refrigeration	10
HAC 230	EPA Refrigerant Certification	1
HAC 237	Basic Refrigeration I	7
HAC 242	Basic Refrigeration I Lab	5
HAC 246	Basic Refrigeration II	6
HAC 249	Job Readiness	5
HAC 255CAP	Basic Refrigeration II Lab	3
HAC 257CAP	Commercial Refrigeration/Advanced Refrigeration	7

**Subtotal: 91**

*Note: HAC 102-169 are prerequisites for Heating & Refrigeration.*

**AAT Degree Requirements**

Technical Course Requirements	91
AAT General Education Requirements	18
Computer Literacy	3

**Subtotal: 112**

AAT Degree General Education Requirements: See list below

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**Highly Recommended Class**

(class could be taken while waiting to start the program)

CAS 105	Keyboarding	3
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*NOTE: CAS 105 or Orientation to Computers and MS Office*

**General Degree Requirements**

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5

Any 100-Level Math Class	5	
PSYC& 100DIV	5	
COLL 102	College Success for All	3

*NOTE: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement*

**Basic HVAC/Refrigeration Service Technician Certificate**

Provides students with the knowledge and skills necessary for entry-level employment in HVAC service and maintenance.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. Students are required to pass six nationally recognized certification exams during the program. All technical courses must be completed with a minimum "C" grade to receive the certificate.

**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

HAC 102	Basic Electricity	5
HAC 105	Electrical Circuits	4
HAC 120	Advanced Controls & Troubleshooting	4
HAC 162	Electric Motors & Their Applications	4
HAC 163	Refrigeration Controls	3
HAC 164	Electric Motors & Troubleshooting	3
HAC 169	Advanced Motor Theory	2
HAC 170	Heating I	7

HAC 175	Heating I Lab	5
HAC 181	Heating II	6
HAC 184	Heating II Lab	4
HAC 230	EPA Refrigerant Certification	1
HAC 237	Basic Refrigeration I	7
HAC 242	Basic Refrigeration I Lab	5
HAC 246	Basic Refrigeration II	6
HAC 255CAP	Basic Refrigeration II Lab	3
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	<b>Subtotal: 87</b>	

**NOTES:**

*HAC 102-169 are prerequisites for Heating & Refrigeration.*

### Refrigeration Specialist Certificate

Provides students with the knowledge and skills necessary for entry-level employment in Refrigeration service and maintenance.

Students are required to pass one (1) state recognized certification and four (4) nationally recognized certification exams during the program. All technical courses must be completed with a minimum “C” grade to receive the certificate.

**Program Length**

This program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

### Completion Requirements

**Prerequisite(s)**

None.

**Program Course List**

HAC 102	Basic Electricity	5
HAC 105	Electrical Circuits	4
HAC 120	Advanced Controls & Troubleshooting	4
HAC 162	Electric Motors & Their Applications	4
HAC 164	Electric Motors & Troubleshooting	3
HAC 230	EPA Refrigerant Certification	1
HAC 237	Basic Refrigeration I	7
HAC 242	Basic Refrigeration I Lab	5
HAC 246	Basic Refrigeration II	6
HAC 255CAP	Basic Refrigeration II Lab	3

**Subtotal: 42**

*Note: HAC 102, HAC 105, HAC 120, HAC 162, and HAC 164 are prerequisites for HAC 237 Basic Refrigeration I.*

### Human Services

#### Human Services - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

Prepares students for a variety of entry- and mid-level positions within the field of human services, which focuses on helping others gain the skills to help themselves.

Students will participate in both classroom instruction and a community-based internship experience with a local human services provider. Students who intern at these agencies serve a variety of populations, including the mentally ill, the developmentally disabled, seniors, persons living with HIV/AIDS, homeless, incarcerated adults, at-risk youth, pregnant and parenting teens, foster families, persons with substance abuse issues, and numerous other specialty areas. Students are responsible for choosing and securing their own internship placement and are primarily eligible for employment in the area in which they choose to complete their internship experience. Internship site choice requires instructor’s approval.

For an AAT or AAS-T degree, students may complete one of the following specialty options: 1) Human Services Generalist or 2) Human Services Chemical Dependency. The Human Services Generalist option can be completed

in as little as six quarters, while the Human Services Chemical Dependency option will require a minimum of eight quarters, plus prerequisites and general education courses. Program completion generally takes 1.5-2 years to satisfy all degree requirements. Students receiving a “C-” or below in a Human Services class must repeat the class in order to satisfy the Human Services program requirements for graduation.

**Employability Requirements**

A background check will be conducted in the first quarter of the program to screen for prior convictions prior to internship placement for advising purposes. If pursuing the CD certificate, students will apply directly to the Department of Health for state certification. Persons with some types of criminal convictions may not be eligible for employment at the discretion of the individual employer.

**Program Length**

The Human Services core classes take six-to-eight quarters to complete, depending on the degree option. The length for the completion of the associate degree may vary depending on the time students need to satisfactorily complete all prerequisites, electives, and general academic classes to meet degree requirements, and may vary between one-and-a-half and two years.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Use therapeutic communications in professional relationships.
- Apply counseling theories and techniques in the human service field.
- Develop strategies for personal and client behavioral health and wellness.
- Use effective case management skills and documentation.
- Develop strategies for treating and intervening on behalf of victims of violence.
- Integrate cultural competency standards into the delivery of the human service field.
- Apply proper ethical and legal guidelines of confidentiality of client information.

**Completion Requirements**

**Prerequisite(s)**

Prospective students must attend a mandatory orientation/advising meeting with the instructors prior to being admitted. Students must be high school graduates or

have passed a high school equivalency test. Students must be over the age of 18 and agree to the background check in the first quarter. Successful completion or transfer of the following courses is required before enrollment in Human Services courses: ENGL& 101, PSYC& 100, COLL 102, and any 100-level Computer Applications class of 3 credits or more.

\*Students must have an internship site secured no later than the end of the first week of the quarter for the Internship I, II, and III courses. Students are advised that a “No Record On File” report related to crimes against persons is generally required by agencies offering internship or employment. Students understand that some internship sites may not be available due to certain records. A non-refundable fee is charged to each student for the background check. Students who do not meet the internship site requirement within the specified timeline will be dropped from the course.

**Program Course List**

HS 115	Therapeutic Communication Skills	5
HS 120	Soft Skills for the Human Services Professional	3
HS 125	HIV/AIDS/Blood-Borne Pathogens & Brief Risk Intervention for the Chemically Dependent	1
HS 127	Introduction to Human Services	5
HS 152	Internship I	3
HS 222	Applied Counseling for the Human Services Professional	5
HS 225	Survey of Community Resources	3
HS 226	Mental Health Assessment & Evaluation	5
HS 227	Behavioral Health & Wellness	5
HS 230	Case Management	5
HS 234DIV	Culturally Competent Practice	5
HS 237	Law & Ethics for Human Services	3
HS 241	Dynamics of Violence	5
HS 245	Internship II	3
<b>Option 1: Human Services Generalist</b>		
HS 215	Human Development for the Human Services Professional	5
HS 240	Survey of Addiction	5
HS 246	Group Process	3
HS 255	Internship III	3
Human	Electives	8

Services  
**Subtotal: 80**

Human Services: See list below

Option 2: Human Services Chemical Dependency		
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
HSCD 134	Introduction to Addictions	5
HSCD 150	The Neuro-Pharmacology of Addiction	5
HSCD 155	Chemical Dependency Counseling I: Individuals & Groups	5
HSCD 180	Addictions Treatment: Ethics & the Law	5
HSCD 215	Case Management & Recordkeeping for the Chemical Dependency Professional	5
HSCD 227	Chemical Dependency Assessment & Evaluation	3
HSCD 229	Suicide Prevention for the Chemical Dependency Professional	1
HSCD 235	Chemical Dependency Practicum	3
HSCD 249	Chemical Dependency Counseling II: Adolescents & Families	5
HSCD 251	Relapse Prevention	3

**Subtotal: 106**

AAT Degree Requirements		
Technical Course Requirements	80-106	
Computer Literacy Requirement	3	
Human Services AAT General Education Requirements	28	

**Subtotal: 111-131**

Human Services AAT Degree General Education Requirements: See list below

AAS-T Degree Requirements		
Technical Course Requirements	80-106	
Computer Literacy Requirement	3	
Human Services AAS-T General Education Requirements	33	

**Subtotal: 116-142**

Human Services AAS-T Degree General Education Requirements: See list below

Approved Human Services Electives (8 Credits Needed)		
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
ASL& 121	American Sign Language I	5
BIOL&	Any BIOL& course	5
LEADR		1-6
HS HSCD		5

**General Education Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (28 credits)**

ENGL& 101	English Composition I	5
CMST& 220	Public Speaking	5
ASL& 121	American Sign Language I	5
MAT 103	Business Mathematics	5
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3

**AAS-T Degree General Education Requirements (33 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 146	Introduction to Statistics	5



10 credits in a social science that meets the diversity requirement

PSYC& General Psychology 5  
100DIV

And

SOC& Introduction to Sociology 5  
101DIV

5 credits in social science, humanities, or science

choose one from the following:

ART& 100 Art Appreciation 5

ASL& 121 American Sign Language I 5

ASL& 122 American Sign Language II 5

BIOL& 160 General Biology w/Lab 5

BIOL& 175 Human Biology w/Lab 5

BIOL& 241 Human A & P I 5

BIOL& 242 Human A & P II 5

BIOL& 260 Microbiology 5

CHEM& 110 Chemical Concepts w/Lab 5

CHEM& 121 Intro to Chemistry 5

CHEM& 131 Introduction to 5

Organic/Biochemistry

CMST& 220 Public Speaking 5

GEOL& 110 Environmental Geology with 5  
Lab

HIST& 146 US History I 5

HIST& 147 US History II 5

HIST& 148 US History III 5

HUM& 101 Introduction to Humanities 5

MUSC& 105 Music Appreciation 5

PHYS& 114 General Physics I with Lab 5

POLS& 202 United States Government 5

PSYC& General Psychology 5  
100DIV

PSYC& 200 Lifespan Psychology 5

PSYC& 220 Psychological Disorders 5

SOC& Introduction to Sociology 5  
101DIV

5 credits in

CMST& 220 Public Speaking 5

3 credits in College Success

COLL 102 College Success for All 3

## Chemical Dependency Option Certificate

Provides specialized knowledge and training about the generalist scope by introducing students to core concepts related to chemical dependency prevention and treatment for individuals, adolescents, groups, and families.

The certificate will provide students with the academic and

technical training background to understand content, models, theories, and research relevant to working with chemically dependent persons and their families and will prepare students for specialized entry-level employment. It is ideal for working professionals who already have a degree but are in need of the specific coursework to obtain state credentials. The required certificate coursework covers the required content areas for the chemical dependency professional credential issued by the Washington State Department of Health (See RCW 246.811 Washington Administrative Code [WAC] Chapter 246-811).

### Employability Requirements

Persons with some types of criminal convictions may not be eligible for employment as determined by the Washington State Department of Health.

Employability for the Chemical Dependency Professional Trainee (CDP-T) and Chemical Dependency Professional (CDP) is at the discretion of the Department of Health. The WA State DOH requires a background screening upon application for the CDP-T professional.

Students wishing to become a CDP are advised to apply in quarter one of their program for the CDP-T through the WA State Department of Health to ensure enough time for the DOH background check and processing in time to utilize the CDP-T credential in quarter three of the program.

### Program Length

This program is a combination of on-line, classroom, laboratory and externship experience. This concentrated certificate program is three quarters long, depending on the time students need to satisfactorily complete all graduation requirements. Degree program completion generally takes 1.5-2 years to satisfy all degree requirements.

### Admission Dates

Fall and spring quarters.

### Completion Requirements

#### Prerequisite(s)

This certificate is designed for employed human services professionals who are working to obtain their chemical dependency state credential, as well as students completing the human services degree at Clover Park Technical College. Students pursuing the certificate outside of Clover Park Technical College's degree program must have a

completed degree from another institution.

A criminal background check is performed for all students enrolled in a human services internship class for the degree program in the first quarter. A non-refundable fee is charged to each student for the background check. Students with certain types of criminal convictions may not be eligible to participate at certain internship sites.

**Note:** The Human Services background check does not take the place of the CDP-T application. Students are expected to have their CDP-T credential in place before Quarter Three of the program and HSCD 235 CD Practicum.

**Program Course List**

PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
HS 125	HIV/AIDS/Blood-Borne Pathogens & Brief Risk Intervention for the Chemically Dependent	1
HSCD 134	Introduction to Addictions	5
HSCD 150	The Neuro-Pharmacology of Addiction	5
HSCD 155	Chemical Dependency Counseling I: Individuals & Groups	5
HSCD 180	Addictions Treatment: Ethics & the Law	5
HSCD 215	Case Management & Recordkeeping for the Chemical Dependency Professional	5
HSCD 227	Chemical Dependency Assessment & Evaluation	3
HSCD 229	Suicide Prevention for the Chemical Dependency Professional	1
HSCD 235	Chemical Dependency Practicum	3
HSCD 249	Chemical Dependency Counseling II: Adolescents & Families	5
HSCD 251	Relapse Prevention	3
<b>Subtotal: 51</b>		

*Note: PSYC& 100DIV is a prerequisite to PSYC& 200 and 220.*

## Interior Design

### Bachelor of Applied Science in Interior Design

Take your education a step further and open the door to additional opportunities in the interior design industry with CPTC’s Bachelor of Applied Science in Interior Design degree. Our coursework is designed to help elevate your creative and technical skills and hone your design process. The BASID degree can help boost your career in multiple facets of the interior design industry, including positions at residential and commercial architecture and design firms. Students who have earned an applied associate degree in interior design or architecture, or equivalent, may apply.

During the BASID degree, students will increase their knowledge of interior design and construction, research current issues and topics affecting the global interior design industry, develop business and project management practices, increase their experience with related technology skills, and apply these to solve problems in the interior design industry.

The hybrid delivery model for this degree has been designed to meet the educational needs of a diverse population including working adults. Mentored study design studios and a capstone course will be used to develop students’ independent thought and critical thinking skills to the level expected from an entry level interior design professional.

**Program Length**

The program is approximately six-to-eight quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters. This is a hybrid program with minimal face-to-face meetings on weekends.

**Additional Information**

Because this is a hybrid program conducted mostly online, students will need regular access to a computer with internet and the ability to run the following software programs:-Autodesk Revit and AutoCAD, Adobe Suite, SketchUp, Enscape, and Microsoft Office (or similar).

**Completion Requirements**

**Prerequisite(s)**

## Admission to the Program

Admission to the program may occur when the following can be documented:

- Successful completion of one of the following:
  - An earned Applied Associate degree in interior design or architecture, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with an overall minimum 2.3 GPA, OR
  - An earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited institution with a minimum 2.3 GPA; enrollment in Interior Design technical bridge courses will be required during the first quarter of the program, OR
  - An appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.
- A minimum grade of 2.0 is required in all general education coursework.
- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits in a transferable social science course.

Applicants must also submit for review by faculty:

- A most current portfolio of interior design and/or related work.
- A formal resume.
- A 400-650-word admission essay describing the candidate's interest in the degree, his or her background and experience in the interior design and/or related industries, how completion of this degree meets his or her personal education and employment goals, his or her understanding of the commitment that will be required to complete the program, and any other information that may support entry to the program.

## Technical Bridge Courses ~~Admission to the Junior Year~~

Once admitted to the program, the following courses or equivalent coursework must be completed before students can register for certain upper-level BAS-ID courses. Students are encouraged to take these courses prior to starting the upper-level (300- and 400-level) coursework:

- DSN 131 Design Communication II
- DSN 146 Concept Development and Ideation
- DSN 155 Design Communication III
- DSN 212 Lighting
- DSN 230 Materials, Furnishings, and Specifications II
- DSN 235 Interior Planning II

## Junior Level Standing

Once admitted to the program, the following must be documented before students are considered to be at junior level standing (in addition to the required English Composition and Social Sciences coursework required for program admission):

- 5 credits in any transferable/common course numbered quantitative/symbolic reasoning course 100 level or above
- 5 credits in any transferable/common course humanities subject – CMST& 220 or ART& 100 recommended
- 5 credits in any transferable/common course numbered natural science course with a lab component. Recommended courses: BIOL& 160 (with lab), CHEM& 110 (with lab), CHEM& 121 (with lab), PHYS& 114 (with lab).

These requirements can be satisfied by coursework completed before or after admission to the BASID program, and may be taken before or concurrently with upper-level BAS classes.

## Graduation Requirements

To successfully complete the degree, students must maintain a minimum grade of 2.0 in all coursework, including program courses and general education courses.

## Second Baccalaureate Degree General Education Requirements

Applicants who have already earned a baccalaureate degree from an accredited college or university may be

able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

**Program Course List**

DSN 310	Interior Construction & Building Systems	5
DSN 312	Building Information Modeling I	5
DSN 314	Building Information Modeling II	5
DSN 316	Environmental & Sustainable Interiors	5
DSN 410	Design Studio I	5
DSN 412	Design Studio II	5
DSN 414	Design Studio III	5
DSN 416	Design Research	5
DSN 418	Design Studio IV	5
DSN 422	Capstone Project	5
BUS 310	Project Management	5
ENG 310	Business Communications	5
PHIL 310DIV	Professional Ethics	5
PSYC 311DIV	Industrial & Organizational Psychology	5
HUM& 101	Introduction to Humanities	5
	Or	
ENGL& 235	Technical Writing	5
	Or	
	Any 100 Level or above transferrable general education course	5
	Plus 15 credits from elective options below	
DSN 350	Intermediate SketchUp for Interior Design	5
DSN 355	Intermediate Photoshop for Interior Design	5
DSN 360	Independent Study	5
DSN 420	Internship	5
	<b>Subtotal: 90</b>	

*NOTE: Total credits for the degree do not include the general education course requirements for admission and junior level standing.*

**Interior Design - Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program prepares students to work for design and architectural firms, home-furnishing venues, and

contractors.

This program is for creative individuals who desire a career in the dynamic profession of interior design. Hospitality, residential, kitchen and bath, and sustainable design are just a few of the many paths an interior designer may pursue. The instructors are active in the design community, bring realistic projects to the classroom, and are committed to providing the most current materials and standards of the interior design profession.

In addition to the degree program, a Kitchen and Bath certificate option is offered every spring quarter. A Sustainable Interior Design certificate option is offered every quarter. New students or continuing program students may enroll for either option.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

The degree program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

DSN 110	Introduction to Interior Design	5
DSN 115	Design Communication I	5
DSN 125	Drawing and Rendering	5
DSN 131	Design Communication II	5
DSN 139	Materials, Furnishings and Specifications I	5
DSN 146	Concept Development and Ideation	5
DSN 155	Design Communication III	5
DSN 162	History of Interiors	5
DSN 167	Interior Planning I	5
DSN 212	Lighting	5
DSN 217	Project I	5
DSN 220	Professional Practice	5
DSN 230	Materials, Furnishings and Specifications II	5

DSN 235	Interior Planning II	5
DSN 246	Special Topics in Design	5
DSN 250	Project II	5
DSN 255	Portfolio and Professional Presentation	5
DSN 260	Internship	4
	Or	
DSN 280	Industry Exploration	4
<b>Subtotal: 89</b>		

AAT Degree Requirements		
Technical Course Requirements		89
AAT General Education Requirements		18
<b>Subtotal: 107</b>		

AAT Degree General Education Requirements: See list below

AAS-T Degree Requirements		
Technical Course Requirements		89
AAS-T Degree General Education Requirements		23
<b>Subtotal: 112</b>		

AAS-T Degree General Education Requirements: See list below

**Optional Electives**

DSN 202	Elements of Kitchen & Bath Design	5
DSN 206	20/20 Drafting	5
DSN 208	Materials & Estimating	4
DSN 211	Business Procedures & Sales	4
DSN 215	Sustainable Design: An Overview	5
DSN 224	Sustainability for Residential & Commercial Applications	4
DSN 226	Sustainable Strategies in Design	5
DSN 229	Sustainable Interiors & the Integrated Design Process	5
DSN 265	(Optional) Independent Study	3
DSN 270	(Optional) Independent Study	4
DSN 275	(Optional) Independent Study	5

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science–T (AAS-T). The different requirements for each degree are listed

below.

AAT Degree General Education Requirements (18 credits)		
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5
5 credits in a social science that meets the diversity requirement		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5

BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:  
 COLL 102 College Success for All 3

### Kitchen and Bath Certificate

This certificate program covers the principles and elements of design for kitchen and bathroom interiors. Clover Park Technical College is an NKBA Affiliated School. The National Kitchen & Bath Association promotes best practices in education and real opportunity for the next generation of kitchen and bath professionals.

#### Program Length

One quarter.

#### Admission Dates

Fall and Spring quarters. This is an evening program with hybrid and online components.

#### Completion Requirements

##### Prerequisite(s)

None.

##### Program Course List

DSN 202	Elements of Kitchen & Bath Design	5
DSN 206	20/20 Drafting	5
DSN 208	Materials & Estimating	4

DSN 211	Business Procedures & Sales	4
		<b>Subtotal: 18</b>

### Sustainable Interior Design Certificate

This certificate program covers sustainable design topics of the built environment, with a focus on interiors.

#### Program Length

One quarter.

#### Admission Dates

Summer, fall, winter, and spring quarters.

#### Program Outcomes

- Explain concepts, principles, and theories of sustainability as they pertain to the built environment.
- Identify local and national laws and regulations related to sustainable design.
- Analyze sustainability and green building rating systems for their availability and applications.
- Examine a broad range of case studies and product options for their impact and contributions to sustainability.
- Develop their own unique sustainable design solution for a given project.
- Defend design ideas and solutions clearly in visual and written communications.

#### Completion Requirements

##### Prerequisite(s)

None.

##### Program Course List

DSN 215	Sustainable Design: An Overview	5
DSN 224	Sustainability for Residential & Commercial Applications	4
DSN 226	Sustainable Strategies in Design	5
DSN 229	Sustainable Interiors & the Integrated Design Process	5

**Subtotal: 19**

### Manufacturing Engineering Technologies

#### Manufacturing Engineering Technologies (MET) AAS-T Degree

Graduates of our Manufacturing Engineering Technologies

(MET) degree & certificate programs are industry-ready professionals with the knowledge & skills to increase domestic and global manufacturing efficiency. Students will accomplish this through optimal use of modern and cutting-edge manufacturing & automation technologies, such as:

- Computer-Aided Design (CAD) & Computer-Aided Manufacturing (CAM) software programs
- Manual machining processes (lathes, mills, surface grinders, tool & cutter grinders, etc.)
- Computer Numeric Control (CNC) Machining & Turning Centers (CNC Mills & Lathes)
- Additive Manufacturing (AKA 3D-Printing)
- Industrial/Collaborative Robots (UR, FANUC, Kuka, Omron, etc.)
- Advanced Computer Aided Engineering (CAE) tools, including Generative Design & Finite Element Analysis (FEA)
- Advanced programming techniques, including Subroutines, Macros, & Logic
- Other CNC Machines: WaterJet, Plasma, Laser, & Coordinate-Measuring Machines (CMM)

Today’s Manufacturing Engineers & Technicians must also possess a broader range of skills and knowledge – beyond the traditional “machinist” skillset – in order to be successful in their careers. These skills focus on entire manufacturing processes of components and assemblies throughout a factory. To accomplish this, students will learn & practically-apply innovative manufacturing engineering techniques, to include:

- The Engineering Design Process
- Design for X (DFX) concepts such as: Design for Manufacturing (DFM), Design for Sustainability (DFS), & Design for Automated Assembly (DFAA)
- Lean Manufacturing/Toyota Production System (TPS) principles
- Siemens “Systems Approach” methodology

Students who complete the Manufacturing Engineering Technologies AAT Degree are prepared for entry into the highly innovative & rapidly growing field of Advanced Manufacturing.

**Program Length**

The program is approximately six (6) quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

**Completion Requirements**

Quarter 1 - Intelligent Machine Operator (IMO) Certificate

MET 111/MEC 201	Systems Approach	5
MET 112/MEC 120	Computer-Aided Design for Manufacturing	5
MET 113/MEC 202	Total Mechatronics	5

Program Core

MET 121	Manual Machining	5
MET 122/MEC 128	Applied Statics & Strengths of Materials	5
MET 123	2D Cutting CAD/CAM/CNC	3
MET 131	CAD/CAM/CNC Mills	5
MET 132/MEC 132	Lean Manufacturing	5
MET 133	Fixturing & Workflows	3
MET 141	CAD/CAM/CNC Lathes	5
MET 142/MEC 165	Robotics	5
MET 143	Programming & Macros	3
MET 211	Multi-Axis CAD/CAM/CNC	5.0
MET 212	Additive Manufacturing	5.0
MET 213	Generative Design	3.0

**Subtotal: 67**

Optional Electives

MET 298	Creative Engineering Lab	5
MET 299	Training & Practice	1 - 5

AAS-T Degree Requirements

Technical Course Requirements	67
AAS-T General Education Requirements	23

**Subtotal: 90**

AAS-T Degree General Education Requirements: See list below

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication

ENGL& 101 English Composition I 5

5 credits in quantitative reasoning

MATH& 141 Precalculus I 5

5 credits in a social science that meets the diversity requirement

PSYC& 100DIV General Psychology 5

SOC& 101DIV Introduction to Sociology 5

5 credits in social science, humanities, or science

Choose one from the following:

ART& 100 Art Appreciation 5

ASL& 121 American Sign Language I 5

ASL& 122 American Sign Language II 5

BIOL& 160 General Biology w/Lab 5

BIOL& 175 Human Biology w/Lab 5

BIOL& 241 Human A & P I 5

BIOL& 242 Human A & P II 5

BIOL& 260 Microbiology 5

CHEM& 110 Chemical Concepts w/Lab 5

CHEM& 121 Intro to Chemistry 5

CHEM& 131 Introduction to 5

Organic/Biochemistry

CMST& 220 Public Speaking 5

GEOL& 110 Environmental Geology with 5

Lab

HIST& 146 US History I 5

HIST& 147 US History II 5

HIST& 148 US History III 5

HUM& 101 Introduction to Humanities 5

MUSC& 105 Music Appreciation 5

NUTR& 101 Nutrition 5

PHYS& 114 General Physics I with Lab 5

POLS& 202 United States Government 5

PSYC& 100DIV General Psychology 5

PSYC& 200 Lifespan Psychology 5

PSYC& 220 Psychological Disorders 5

SOC& 101DIV Introduction to Sociology 5

3 credits in College Success:

COLL 102 College Success for All 3

**Program Outcomes**

- Employ safe practices while operating modern manufacturing production machines, equipment, & tools.
- Apply sustainability practices to manufacturing workflows through principles (e.g., Lean Manufacturing, Systems Approach) to increase overall production efficiency.
- Operate complex machinery involving multiple forms of power and control to perform manufacturing processes.
- Utilize new and emerging digital work environments to aid in the creation, modification, analysis, and optimization of manufacturing production processes.
- Automate manufacturing systems and processes using new and emerging technologies.
- Apply engineering design processes to create, implement, & troubleshoot production processes & systems.

**Manufacturing Engineering Technologies (MET) AAT Degree**

Graduates of our Manufacturing Engineering Technologies (MET) degree & certificate programs are industry-ready professionals with the knowledge & skills to increase domestic and global manufacturing efficiency. Students will accomplish this through optimal use of modern and cutting-edge manufacturing & automation technologies, such as:

- Computer-Aided Design (CAD) & Computer-Aided Manufacturing (CAM) software programs
- Manual machining processes (lathes, mills, surface grinders, tool & cutter grinders, etc.)
- Computer Numeric Control (CNC) Machining & Turning Centers (CNC Mills & Lathes)
- Additive Manufacturing (AKA 3D-Printing)
- Industrial/Collaborative Robots (UR, FANUC, Kuka, Omron, etc.)
- Advanced Computer Aided Engineering (CAE) tools, including Generative Design & Finite Element Analysis (FEA)
- Advanced programming techniques, including Subroutines, Macros, & Logic
- Other CNC Machines: WaterJet, Plasma, Laser, &



Coordinate-Measuring Machines (CMM)

Today’s Manufacturing Engineers & Technicians must also possess a broader range of skills and knowledge – beyond the traditional “machinist” skillset – in order to be successful in their careers. These skills focus on entire manufacturing processes of components and assemblies throughout a factory. To accomplish this, students will learn & practically-apply innovative manufacturing engineering techniques, to include:

- The Engineering Design Process
- Design for X (DFX) concepts such as: Design for Manufacturing (DFM), Design for Sustainability (DFS), & Design for Automated Assembly (DFAA)
- Lean Manufacturing/Toyota Production System (TPS) principles
- Siemens “Systems Approach” methodology

Students who complete the Manufacturing Engineering Technologies AAT Degree are prepared for entry into the highly innovative & rapidly growing field of Advanced Manufacturing.

**Program Length**

The program is approximately six (6) quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

**Completion Requirements**

Quarter 1: Intelligent Machine Operator (IMO) Certificate

MET 111/MEC 201	Systems Approach	5
MET 112/MEC 120	Computer-Aided Design for Manufacturing	5
MET 113/MEC 202	Total Mechatronics	5

**Program Core**

MET 121	Manual Machining	5
MET 122/MEC 128	Applied Statics & Strengths of Materials	5
MET 123	2D Cutting CAD/CAM/CNC	3
MET 131	CAD/CAM/CNC Mills	5
MET 132/MEC 132	Lean Manufacturing	5

MET 133	Fixturing & Workflows	3
MET 141	CAD/CAM/CNC Lathes	5
MET 142/MEC 165	Robotics	5
MET 143	Programming & Macros	3
MET 211	Multi-Axis CAD/CAM/CNC	5.0
MET 212	Additive Manufacturing	5.0
MET 213	Generative Design	3.0
MET 221/MEC 163	Industrial Survey	5.0
MET 222/MEC 289	Internship	5.0
MET 223	Production Supervisor	3.0
		<b>Subtotal: 80</b>

Optional Electives

MET 298	Creative Engineering Lab	5
MET 299	Training & Practice	1 - 5

AAT Degree Requirements

Technical Course Requirements	80
AAT General Education Requirements	18

**Subtotal: 98**

AAT Degree General Education Requirements: See list below

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
MAT 105	Mathematics for Industrial Professionals	5
Or		
MATH& 141	Precalculus I	5
PSYC& 100DIV	General Psychology	5
Or		
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3

**Program Outcomes**

- Employ safe practices while operating modern manufacturing production machines, equipment, & tools.
- Apply sustainability practices to manufacturing workflows through principles (e.g., Lean Manufacturing, Systems Approach) to increase overall production efficiency.
- Operate complex machinery involving multiple forms of power and control to perform manufacturing processes.
- Utilize new and emerging digital work environments to aid in the creation, modification, analysis, and optimization of manufacturing production processes.
- Automate manufacturing systems and processes using new and emerging technologies.
- Apply engineering design processes to create, implement, & troubleshoot production processes & systems.

**Intelligent Machine Operator (IMO) Certificate**

The Intelligent Machine Operator certificate covers the fundamental skills & techniques needed for someone to operate safely and efficiently in an advanced manufacturing environment. This certificate is ideal for entry-level industry professionals who are looking to enter the advanced manufacturing workforce.

**Program Length**

The program is one (1) quarter long.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

MET 111/MEC 201	Systems Approach	5
MET 112/MEC 120	Computer-Aided Design for Manufacturing	5
MET 113/MEC 202	Total Mechatronics	5

**Subtotal: 15**

**Additive Manufacturing Specialist Certificate**

The Additive Manufacturing Specialist certificate covers the fundamental design & manufacturing considerations of additive manufacturing processes in a practical, hands-on

environment. This certificate is ideal for both hobbyists and industry professionals alike who are interested in learning how to use innovative additive manufacturing technologies.

**Program Length**

The program is one (1) quarter long.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

MET 122/MEC 128	Applied Statics & Strengths of Materials	5
MET 212	Additive Manufacturing	5.0
MET 213	Generative Design	3.0

**Subtotal: 13**

**Manufacturing Automation Specialist Certificate**

The Manufacturing Automation Specialist certificate covers the fundamental operation & programming of manufacturing systems in a practical, hands-on environment. This certificate is ideal for both hobbyists and industry professionals alike who are interested in learning how to program & utilize industrial equipment for automated production.

**Program Length**

The program is one (1) quarter long.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

MET 142/MEC 165	Robotics	5
MET 143	Programming & Macros	3

**Subtotal: 8**

**Manufacturing Workflow Specialist Certificate**

The Manufacturing Workflow Specialist certificate covers the fundamental design & manufacturing process workflow principles in a practical, hands-on environment.

This certificate is ideal for both hobbyists and industry professionals alike who are interested in learning how to optimize value-added production up-time and minimize production downtime through fixture & workflow design.

**Program Length**

The program is one (1) quarter long.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

MET 132/MEC 132	Lean Manufacturing	5
MET 133	Fixturing & Workflows	3
<b>Subtotal:</b>		<b>8</b>

**Massage Studies**

**Massage Studies - Associate of Applied Technology Degree**

The Massage Studies AAT degree prepares successful students for employment and practice in a variety of workplace settings. Graduates from this program are qualified for positions at spas, clinics, hospitals and successful private practices.

Students develop a strong foundation in Swedish massage and deep tissue techniques. Clinical massage students benefit from advanced training in treatment applications and assessment. Teaching techniques are varied, addressing a wide variety of learning styles.

Therapeutic Massage centers around safe, therapeutic, non-sexual and non-judgemental touch. Clover Park Technical College's Massage Program adheres to the highest standards of professional conduct, including non-discriminatory and inclusive practice. Enrolled students are required to participate in the exchange of applied massage techniques with classmates in a supervised and professional setting. On-campus massages are performed in an open-concept clinic setting with privacy curtains in place. Participation in the student operated clinic allows students to gain clinical experience working with a diverse clientele under instructor supervision.

Topics covered include, but are not limited to, massage theory and practice, anatomy, physiology, pathology, kinesiology, orthopedic assessment, pregnancy massage,

sports massage, deep tissue, myofascial techniques, lymphatic drainage, on-site seated massage, hydrotherapy, hot-stone massage, and mini-spa applications.

Business classes introduce the skills and theories necessary for successful employment, such as professional ethics, goal setting, business planning, insurance billing, networking and communicating with health care professionals, marketing, job networking, resume writing, and interviewing.

Included in the associate degree program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills. These classes are offered at various times outside the regular Massage program hours.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Physical Activity Requirements**

Common physical requirements to perform massage include the ability to stand for up to two hours while applying practical application of massage strokes, the ability to successfully support and move client's body parts including head, neck, and limbs, and repetitive use of the hands, fingers and thumbs to compress and manipulate tissue. This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress the wrists, shoulders, back, and neck of practitioners.

**Employability Requirements - license required.**

Graduates are able to apply for licensure from Washington State DOH after passing the Federation of State Massage & Bodywork Licensing Examination (MBLEx) or the National Certification Board for Therapeutic Massage & Bodywork (NCBTMB) Board certification exam. The Washington State Department of Health (DOH) requires a minimum of 625 hours of training in Massage Studies by an approved educational program. A Washington State Patrol background check will screen for prior convictions in advance of state licensing. Persons with some types of criminal convictions may not be eligible for licensure. Upon meeting the requirements set forth by the DOH

graduates are eligible to work in the industry as a Licensed Massage Therapist (LMT) in the state of Washington.

**Program Length**

The associate degree program may take up to six quarters, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall quarter.

**Completion Requirements**

In addition to successfully passing all of the courses, students must also meet the requirements of the Washington State Department of Health (DOH) in order to sit for the licensure examination. These include completing at least 625 hours of training, a criminal background check, and certification in American Red Cross first aid and American Heart Association CPR or the equivalent. CPR training must be in person. Additional information regarding the DOH requirements can be found here: <https://doh.wa.gov/licenses-permits-and-certificates/professions-new-renew-or-update/massage-therapist>.

**Prerequisite(s)**

Students must have documentation of training in American Red Cross first aid and American Heart Association CPR or the equivalent prior to progressing to second quarter. CPR training must be in person. A Washington State Patrol check will be required during the first quarter of study to progress to the second quarter. Some results from the background check may prevent individuals from participating in certain classes.

**Program Course List**

MASST 101	Swedish Massage Theory	4
MASST 103	Swedish Massage Practice	4
MASST 105	Anatomy, Physiology & Pathology I	3
MASST 107	Kinesiology I	3
MASST 108	Business and Ethics I	3
COLL 102	College Success for All	3
MASST 138	Deep Tissue Massage Theory	4
MASST 140	Deep Tissue Massage Practice	4
MASST 142	Anatomy, Physiology & Pathology II	3
MASST 154	Kinesiology II	3
MASST 164	Business and Ethics II	3

MASST 168	Student Clinic I	1
MASST 205	Clinical Massage Theory and Pathology	3
MASST 210	Clinical Massage Practice and Pathology	3
MASST 215	Anatomy, Physiology & Pathology III	3
MASST 220	Kinesiology III	2
MASST 225	Business and Ethics III	3
MASST 230	Student Clinic II	2
MASST 235	Assess and Treat the Upper Body	4
MASST 240	Assess and Treat the Lower Body	4
MASST 245	Massage Business Start Up	3
MASST 250	Practicum	1
MASST 255	Self-Care for the Massage Therapist	1
ENGL& 101	English Composition I	5
PSYC& 100DIV	General Psychology	5
MAT 103	Business Mathematics	5
	Or	
	Any 100-Level Math Class	5
	Computer Literacy Requirement	3
	Or	
CAH 105CL	Computer Applications	5
NUTR& 101	Nutrition	5

**Subtotal: 90-92**

*Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam.*

**Massage Therapy Certificate**

The Massage Therapy Certificate program will prepare students to enter the Massage Industry for employment in a variety of workplace settings. Students who successfully graduate and complete the state licensing requirements are qualified to offer treatments in spas, clinics, hospitals, private practice, and various healthcare facilities.

Students enrolled in the program will develop a foundation in Swedish Massage and various deep tissue techniques. Topics included in the program are massage theory, massage practice, anatomy & physiology, kinesiology, pathology, complementary bodywork modalities, ethics, laws, and state regulations. Business classes include

insurance billing, marketing, networking, resume writing and interviewing.

Therapeutic Massage centers around safe, therapeutic, non-sexual and non-judgemental touch. Clover Park Technical College's Massage Program adheres to the highest standards of professional conduct, including non-discriminatory and inclusive practice. Enrolled students are required to participate in the exchange of applied massage techniques with classmates in a supervised and professional setting. On-campus massages are performed in an open-concept clinic setting with privacy curtains in place. Participation in the student operated clinic allows students to gain clinical experience working with a diverse clientele under instructor supervision.

Enrolled students who complete the Massage Therapy Certificate Program can expand their knowledge and skills by completing the Associates of Applied Technology degree in Massage Studies. This extended educational opportunity continues to build on the foundation of the Massage Therapy Program. Students will gain a deeper understanding and obtain advanced training in the application of clinical massage. Topics include additional pathologies, advanced physical assessments, postural analysis, and critical thinking skills to expand knowledge as a therapist in clinical assessment and treatment.

**Physical Activity Requirements**

Common physical requirements to perform massage include the ability to stand for up to two hours while applying practical application of massage strokes, the ability to successfully support and move client’s body parts including head, neck, and limbs, and repetitive use of the hands, fingers and thumbs to compress and manipulate tissue. This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.). Massage practitioners are often standing and bending for long periods of time (up to two hours) while performing massages. This profession tends to stress the wrists, shoulders, back, and neck of practitioners.

**Employability Requirements - license required.**

Graduates are able to apply for licensure from Washington State DOH after passing the Federation of State Massage & Bodywork Licensing Examination (MBLEx) or the National Certification Board for Therapeutic Massage & Bodywork (NCBTMB) Board certification exam. The Washington State Department of Health (DOH) requires a minimum of 625 hours of training in Massage Studies by an approved educational program. A Washington State

Patrol background check will screen for prior convictions in advance of state licensing. Persons with some types of criminal convictions may not be eligible for licensure. Upon meeting the requirements set forth by the DOH graduates are eligible to work in the industry as a Licensed Massage Therapist (LMT) in the state of Washington.

**Program Length**

The Massage certificate program is designed to be completed in three (3) quarters. It may take longer from some students, depending on the time needed to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall quarter.

**Completion Requirements**

In addition to successfully passing all of the courses, students must also meet the requirements of the Washington State Department of Health (DOH) in order to sit for the licensure examination. These include completing at least 625 hours of training, a criminal background check, and certification in American Red Cross first aid and American Heart Association CPR or the equivalent. CPR training must be in person. Additional information regarding the DOH requirements can be found here: <https://doh.wa.gov/licenses-permits-and-certificates/professions-new-renew-or-update/massage-therapist>.

**Prerequisite(s)**

Students must have documentation of training in American Red Cross first aid and American Heart Association CPR or the equivalent prior to progressing to second quarter. CPR training must be in person. A Washington State Patrol check will be required during the first quarter of study to progress to the second quarter. Some results from the background check may prevent individuals from participating in certain classes.

**Program Course List**

MASST 101	Swedish Massage Theory	4
MASST 103	Swedish Massage Practice	4
MASST 105	Anatomy, Physiology & Pathology I	3
MASST 107	Kinesiology I	3
MASST 108	Business and Ethics I	3
COLL 102	College Success for All	3

MASST 138	Deep Tissue Massage Theory	4
MASST 140	Deep Tissue Massage Practice	4
MASST 142	Anatomy, Physiology & Pathology II	3
MASST 154	Kinesiology II	3
MASST 164	Business and Ethics II	3
MASST 168	Student Clinic I	1
MASST 205	Clinical Massage Theory and Pathology	3
MASST 210	Clinical Massage Practice and Pathology	3
MASST 215	Anatomy, Physiology & Pathology III	3
MASST 220	Kinesiology III	2
MASST 225	Business and Ethics III	3
MASST 230	Student Clinic II	2
<b>Subtotal: 54</b>		

## Mechatronics

### Bachelor of Applied Science in Industrial Mechatronics Engineering Technology and Automation

CPTC's Bachelor of Applied Science in Mechatronics Engineering Technology and Automation (BAS-META) degree is the first Bachelor's degree in mechatronics to be offered anywhere in the Pacific NW. Mechatronics focuses on the convergence of mechanical, electrical and computer controls in complex systems and automation. The BAS-META builds upon associate degree coursework by adding hands-on work with cutting edge industry 4.0 technology and practices such as IIOT, Digital Twins, Sustainable Manufacturing, and Data Analytics.

The BAS-META degree has been designed to meet the needs of students who want to become: Automation engineers, Applications Engineers, Robotic Integrators, PLC Programmers, and a host of other engineering technology related job titles.

Modern life is filled with mechatronic systems: they clean the water you drink, manage the car you drive and are involved in the creation of nearly everything you see around you. Every industry employs some level of mechatronics. BAS-META graduates will possess unique strength in the creation and use of complex systems as they understand the interplay between electrical, mechanical and computerized systems. It is imperative for the

sustainable growth of our community and region that there is a qualified workforce to adapt to continuously changing technologies. BAS-META graduates will be prepared to fulfill these needs while driving innovation in our industry forward.

#### Program Length

A typical full-time student will complete the program in an estimate of 21 months. Half-time students should anticipate completion in an estimated 36-42 months. Full time students should plan to dedicate 45 hours per week to the program.

#### Admission Dates

Fall, Winter, Spring, and Summer quarters, although students may be admitted at any time subject to the availability of spaces and at the discretion of program faculty.

#### Completion Requirements

##### Prerequisite(s)

**Admission to the program may occur when the following can be documented:**

- Successful completion (or proof of enrollment in the last quarter thereof) of either:
  - An articulated Mechatronics Associates degree, including CPTC's Mechatronics AAS-T, **with a minimum 2.3 GPA; OR**
  - An earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited institution **with a minimum 2.3 GPA** and proof of enrollment in the Mechatronics technical bridge courses (MEC 120, MEC 201, and MEC 202); **OR**
  - An appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.
- 5 college-level credits in English Composition (ENGL& 101 or higher).

- 5 college-level credits of MATH & 141 or equivalent pre-calculus course.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 credits of MATH& 141 or equivalent pre-calculus course.
- 5 of Social Sciences course that meets CPTC diversity requirements.
- 5 credits of any transferrable/common course numbered general education courses 100-level or above: Social Science, Humanities, or Natural Science.

These requirements can be satisfied by coursework completed before or after admission to the BAS-META program, and may be taken concurrently with upper-level BAS classes.

**Second Baccalaureate Degree General Education Requirements**

Applicants who have already earned a baccalaureate degree from an accredited college or university may be able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

Students must still complete program-specific general education degree requirements if not otherwise satisfied. The program-specific general education requirements in the BAS-META degree are listed below:

- Professional Ethics or equivalent

**Program Course List**

MEC 304	Fixtures and Workflow - Knowledge	1-24
MEC 307	Industrial Internet of Things - Knowledge	1-24
MEC 314	Environmentally Sustainable Manufacturing - Knowledge	1-24
MEC 317	Programming for Industry 4.0 - Knowledge	1-24
MEC 404	Fixtures and Workflow - Skill	1-24
MEC 407	Industrial Internet of Things -	1-24

	Skill	
MEC 414	Environmentally Sustainable Manufacturing - Skill	1-24
MEC 417	Programming for Industry 4.0 - Skill	1-24
MEC 450	Mechatronics Project Management Preparation and Planning	2
MEC 490CAP	Mechatronics Project Management	5
	English Composition or Communications	5
MATH& 142	Precalculus II, Functional Trigonometry	5
	Any Lab-Based Science	5
	Humanities Elective	5
PHIL 310DIV	Professional Ethics	5
	Any 100 level or above general education course	2
	Plus 24 credits from electives below	
MEC 301	Introduction to Industry 4.0 - Knowledge	1-24
MEC 324	Advanced Embedded Systems - Knowledge	1-24
MEC 327	Advanced Sensors and Actuators - Knowledge	1-24
MEC 334	AI and Data Analytics - Knowledge	1-24
MEC 340	Control Systems - Knowledge	1-24
MEC 342	Programmable Automation Controllers - Knowledge	1-24
MEC 344	Machine Vision - Knowledge	1-24
MEC 347	Interconnectivity in Cyber-Physical Systems - Knowledge	1-24
MEC 352	Contract Manufacturing in Industry 4.0 - Knowledge	1-24
MEC 354	Machine Creation - Knowledge	1-24
MEC 357	Dynamics of Machinery and Kinematics - Knowledge	1-24
MEC 364	Computerized Maintenance Management Systems - Knowledge	1-24
MEC 367	Automation Evaluation and Implementation - Knowledge	1-24
MEC 370	Simulation, Emulation, and Digital Twins - Knowledge	1-24
MEC 372	Production Process Development in Industry 4.0 - Knowledge	1-24

MEC 374	Process Control - Knowledge	1-24
MEC 377	Cyber-Physical Product Systems - Knowledge	1-24
MEC 380	Human-Centric Digitalization - Knowledge	1-24
MEC 384	Cyber-Physical Security - Knowledge	1-24
MEC 385	Management in Industry 4.0 - Knowledge	1-24
MEC 387	Robotic Integration - Knowledge	1-24
	Plus 16 credits from electives below	
MEC 424	Advanced Embedded Systems - Skill	1-24
MEC 427	Advanced Sensors and Actuators - Skill	1-24
MEC 434	AI and Data Analytics - Skill	1-24
MEC 442	Programmable Automation Controllers - Skill	1-24
MEC 444	Machine Vision - Skill	1-24
MEC 447	Interconnectivity in Cyber-Physical Systems - Skill	1-24
MEC 452	Contract Manufacturing in Industry 4.0 - Skill	1-24
MEC 454	Machine Creation - Skill	1-24
MEC 457	Dynamics of Machinery and Kinematics - Skill	1-24
MEC 464	Computerized Maintenance Management Systems - Skill	1-24
MEC 467	Automation Evaluation and Implementation - Skill	1-24
MEC 470	Simulation, Emulation, and Digital Twins - Skill	1-24
MEC 472	Production Process Development in Industry 4.0 - Skill	1-24
MEC 474	Process Control - Skill	1-24
MEC 477	Cyber-Physical Product Systems - Skill	1-24
MEC 480	Human-Centric Digitalization - Skill	1-24
MEC 484	Cyber-Physical Security - Skill	1-24
MEC 485	Management in Industry 4.0 - Skill	1-24
MEC 487	Robotic Integration - Skill	1-24

**Subtotal: 94**

## Bachelor of Applied Science in Mechatronics Engineering Technology and Automation

CPTC's Bachelor of Applied Science in Mechatronics Engineering Technology and Automation (BAS-META) degree is the first Bachelor's degree in mechatronics to be offered anywhere in the Pacific NW. Mechatronics focuses on the convergence of mechanical, electrical and computer controls in complex systems and automation. The BAS-META builds upon associate degree coursework by adding additional engineering math and physics, as well as hands-on work with cutting edge industry 4.0 technology and practices such as IIOT, Digital Twins, Sustainable Manufacturing, and Data Analytics.

The BAS-META degree has been designed to meet the needs of students who want to become: Automation engineers, Applications Engineers, Robotic Integrators, PLC Programmers, and a host of other engineering technology related job titles.

Modern life is filled with mechatronic systems: they clean the water you drink, manage the car you drive and are involved in the creation of nearly everything you see around you. Every industry employs some level of mechatronics. BAS-META graduates will possess unique strength in the creation and use of complex systems as they understand the interplay between electrical, mechanical and computerized systems. It is imperative for the sustainable growth of our community and region that there is a qualified workforce to adapt to continuously changing technologies. BAS-META graduates will be prepared to fulfill these needs while driving innovation in our industry forward.

### Program Length

A typical full-time student will complete the program in an estimate of 21 months. Half-time students should anticipate completion in an estimated 36-42months. Full time students should plan to dedicate 45 hours per week to the program.

### Admission Dates

Fall and Spring quarters, although students may be admitted in other quarters subject to the availability of spaces and at the discretion of program faculty.

### Completion Requirements

### Prerequisite(s)



**Admission to the program may occur when the following can be documented:**

- Successful completion (or proof of enrollment in the last quarter thereof) of either:
  - An articulated Mechatronics Associates degree, including CPTC’s Mechatronics AAS-T, **with a minimum 2.3 GPA; OR**
  - An earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited institution **with a minimum 2.3 GPA** and proof of enrollment in the Mechatronics technical bridge courses (MEC 120, MEC 201, and MEC 202); **OR**
  - An appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.
- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits of MATH & 141 or equivalent pre-calculus course.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 credits of MATH& 141 or equivalent pre-calculus course.
- 5 of Social Sciences course that meets CPTC diversity requirements.
- 5 credits of any transferrable/common course numbered general education courses 100-level or above: Social Science, Humanities, or Natural Science.

These requirements can be satisfied by coursework completed before or after admission to the BAS-META program, and may be taken concurrently with upper-level BAS classes.

**Second Baccalaureate Degree General Education Requirements**

Applicants who have already earned a baccalaureate degree from an accredited college or university may be able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

Students must still complete program-specific general education degree requirements if not otherwise satisfied. The program-specific general education requirements in the BAS-META degree are listed below:

- Calculus I
- Calculus II
- Engineering Physics I
- Engineering Physics II
- Professional Ethics or equivalent

**Program Course List**

MEC 304	Fixtures and Workflow - Knowledge	1-24
MEC 307	Industrial Internet of Things - Knowledge	1-24
MEC 314	Environmentally Sustainable Manufacturing - Knowledge	1-24
MEC 317	Programming for Industry 4.0 - Knowledge	1-24
MEC 404	Fixtures and Workflow - Skill	1-24
MEC 407	Industrial Internet of Things - Skill	1-24
MEC 414	Environmentally Sustainable Manufacturing - Skill	1-24
MEC 417	Programming for Industry 4.0 - Skill	1-24
MEC 450	Mechatronics Project Management Preparation and Planning	2
MEC 490CAP	Mechatronics Project Management	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 151	Calculus I	5
MATH& 152	Calculus II	5
PHIL 310DIV	Professional Ethics	5
PHYS& 221	Engineering Physics I	6
PHYS& 222	Engineering Physics II	6
	English Composition or Communications	5

	Humanities Elective	5		MEC 444	Controllers - Skill	
	Plus 15 credits from electives below			MEC 447	Machine Vision - Skill	1-24
MEC 301	Introduction to Industry 4.0 - Knowledge	1-24		MEC 452	Interconnectivity in Cyber-Physical Systems - Skill	1-24
MEC 324	Advanced Embedded Systems - Knowledge	1-24		MEC 454	Contract Manufacturing in Industry 4.0 - Skill	1-24
MEC 327	Advanced Sensors and Actuators - Knowledge	1-24		MEC 457	Machine Creation - Skill	1-24
MEC 334	AI and Data Analytics - Knowledge	1-24		MEC 464	Dynamics of Machinery and Kinematics - Skill	1-24
MEC 340	Control Systems - Knowledge	1-24		MEC 467	Computerized Maintenance Management Systems - Skill	1-24
MEC 342	Programmable Automation Controllers - Knowledge	1-24		MEC 470	Automation Evaluation and Implementation - Skill	1-24
MEC 344	Machine Vision - Knowledge	1-24		MEC 472	Simulation, Emulation, and Digital Twins - Skill	1-24
MEC 347	Interconnectivity in Cyber-Physical Systems - Knowledge	1-24		MEC 477	Production Process Development in Industry 4.0 - Skill	1-24
MEC 352	Contract Manufacturing in Industry 4.0 - Knowledge	1-24		MEC 480	Process Control - Skill	1-24
MEC 354	Machine Creation - Knowledge	1-24		MEC 487	Cyber-Physical Product Systems - Skill	1-24
MEC 357	Dynamics of Machinery and Kinematics - Knowledge	1-24			Human-Centric Digitalization - Skill	1-24
MEC 364	Computerized Maintenance Management Systems - Knowledge	1-24		MEC 484	Cyber-Physical Security - Skill	1-24
MEC 367	Automation Evaluation and Implementation - Knowledge	1-24		MEC 485	Management in Industry 4.0 - Skill	1-24
MEC 370	Simulation, Emulation, and Digital Twins - Knowledge	1-24			Robotic Integration - Skill	1-24
MEC 372	Production Process Development in Industry 4.0 - Knowledge	1-24			<b>Subtotal: 94</b>	
MEC 374	Process Control - Knowledge	1-24			English Composition or Communications Course options	
MEC 377	Cyber-Physical Product Systems - Knowledge	1-24		ENGL& 102	Composition II	5
MEC 380	Human-Centric Digitalization - Knowledge	1-24		ENGL& 235	Technical Writing	5
MEC 385	Management in Industry 4.0 - Knowledge	1-24		ENG 310	Business Communications	5
MEC 387	Robotic Integration - Knowledge	1-24		CMST& 220	Public Speaking	5
	Plus 10 credits from electives below				Humanities Course Options	
MEC 424	Advanced Embedded Systems - Skill	1-24		ART& 100	Art Appreciation	5
MEC 427	Advanced Sensors and Actuators - Skill	1-24		ASL& 121	American Sign Language I	5
MEC 434	AI and Data Analytics - Skill	1-24		ASL& 122	American Sign Language II	5
MEC 442	Programmable Automation	1-24		HUM& 101	Introduction to Humanities	5
				MUSC& 105	Music Appreciation	5
				CMST& 220	Public Speaking	5

### Mechatronics - Associate in Applied Science – T Degree

Mechatronics focuses on the convergence of mechanical, electrical and computer controls in complex systems and automation. It is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an

integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture. Modern life is filled with mechatronic systems: they clean the water you drink, manage the car you drive and are involved in the creation of nearly everything you see around you. Every industry employs some level of mechatronics.

Clover Park Technical College’s AAS-T Mechatronics degree provides the skills needed to succeed in this exciting field. The program begins with courses that establish a solid base of technical skills and an understanding of the various disciplines that make up mechatronics as well as lean manufacturing and quality standards. Courses are taught with an eye toward linking disciplines together for larger mechatronic systems. Subsequent courses then build expertise in the foundational skills while increasingly integrating all skills into the design, construction, optimization, maintenance, and repair of full mechatronics systems. Students who complete the Mechatronics AAS-T Degree will also have the option to further their education by enrolling in our BAS in Mechatronics Engineering Technology and Automation (BAS- META), which is the first Bachelor’s degree in mechatronics to be offered anywhere in the Pacific NW.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

The program is approximately seven quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

To enter the program, a student must be eligible to take college-level English and college-level psychology, or another social science or humanities course.

This program assumes that students will be able to enroll in, or will have passed, MATH& 141 by the start of the

third quarter of the program. Any developmental coursework that a student may be required to take to achieve this may increase the program length and is not reflected in credit counts as shown below. Math sequences to meet this requirement must be planned with your advisor prior to program enrollment.

**Program Course List**

**Quarter 1 - Preparation**

MEC 201 Systems Approach (or MET 111), MEC 120 CAD I (or MET 112), and MEC 202 Total Mechatronics (or MET113)

MET 112/MEC 120	Computer-Aided Design for Manufacturing	5
MET 111/MEC 201	Systems Approach	5
MET 113/MEC 202	Total Mechatronics	5
COLL 102	College Success for All	3
<b>Program Core</b>		
MEC 115	DC Circuits	5
MEC 140CL	Computer Programming and Logic	5
MET 122/MEC 128	Applied Statics & Strengths of Materials	5
MEC 230	Programmable Control of Fluid Power	5
MET 132/MEC 132	Lean Manufacturing	5
MEC 235	Programmable Controls in Industrial Networks	5
MET 142/MEC 165	Robotics	5
MEC 240	Motors, Drives, & Mechanical Transfer Systems	5
MEC 116	AC Circuits	5
MEC 163	Industrial Survey	5
MEC 273	Applied Mechatronics Cap. AAS-T General Education Requirements	5 23
		<b>Subtotal: 93</b>

AAS-T General Education Requirements: see list below

Technical Electives:

Mechatronics Elective Options (may be taken at discretion of student or advise of instructor)

MET 121	Manual Machining	5
MET 123	2D Cutting CAD/CAM/CNC	3
MET 131	CAD/CAM/CNC Mills	5
MET 133	Fixturing & Workflows	3
MET 141	CAD/CAM/CNC Lathes	5
MET 143	Programming & Macros	3
MET 298	Creative Engineering Lab	5
MET 299	Training & Practice	1 - 5

5 credits in social science, humanities, or science

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

**General Degree Requirements**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. Required credits include:

- 5 credits in communication: ENGL& 101 (or higher)
- 5 credits in quantitative reasoning: MATH& 141 (or higher)
- 5 credits in a social science or humanities course: PSYC& 100DIV, or other transferable social science or humanities course that meets the CPTC diversity requirement.
- 5 credits in a transferable Social Science
- 3 credits in COLL 102 \*must be taken in first 2 quarters

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication		
ENGL& 101	English Composition I	5
5 credits in quantitative reasoning		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5
5 credits in a social science that meets the diversity requirement		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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**Mechatronics - Associate of Applied Technology Degree**

Mechatronics is a multidisciplinary approach combining mechanical engineering, electrical engineering, process control engineering, and software engineering into an integrated skill set for construction, repair, and optimization of complex industrial equipment. This makes it applicable to a wide range of growing industries including automation and robotics, advanced manufacturing, aerospace and transportation systems, process control, logistics and supply chain management, and agriculture.

Clover Park Technical College's AAT Mechatronics degree provides the skills needed to succeed in this exciting field. The program begins with courses that establish a solid base of technical skills and an

understanding of the various disciplines that make up mechatronics as well as lean manufacturing and quality standards. Courses are taught with an eye toward linking disciplines together for larger mechatronic systems. Subsequent courses then build expertise in the foundational skills while increasingly integrating all skills into the design, construction, optimization, maintenance, and repair of full mechatronics systems.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

To enter the program, a student must be eligible to take college-level English and college-level psychology, or another social science or humanities course.

Any developmental coursework that a student may be required to take to achieve this may increase the program length and is not reflected in credit counts as shown below. Math sequences to meet this requirement must be planned with your advisor prior to program enrollment.

**Program Course List**

**Quarter 1 - Preparation**

MET 112/MEC 120	Computer-Aided Design for Manufacturing	5
MET 111/MEC 201	Systems Approach	5
MET 113/MEC 202	Total Mechatronics	5
COLL 102	College Success for All	3

**Program Core**

MEC 115	DC Circuits	5
MEC 140CL	Computer Programming and Logic	5
MET 122/MEC 128	Applied Statics & Strengths of Materials	5
MEC 230	Programmable Control of	5

	Fluid Power	
MET 132/MEC 132	Lean Manufacturing	5
MEC 235	Programmable Controls in Industrial Networks	5
MET 142/MEC 165	Robotics	5
MEC 240	Motors, Drives, & Mechanical Transfer Systems	5
MEC 116	AC Circuits	5
MEC 163	Industrial Survey	5
MEC 173	Applied Mechatronics	5
MEC 289	Internship/Work Experience	5
	AAT General Education Requirements	18

**Subtotal: 93**

*AAT General Education Requirements: See list above.*

**Technical Electives:**

Mechatronics Elective Options (may be taken at discretion of student)

MET 121	Manual Machining	5
MET 123	2D Cutting CAD/CAM/CNC	3
MET 131	CAD/CAM/CNC Mills	5
MET 133	Fixturing & Workflows	3
MET 141	CAD/CAM/CNC Lathes	5
MET 143	Programming & Macros	3
MET 298	Creative Engineering Lab	5
MET 299	Training & Practice	1 - 5

**General Degree Requirements**

AAT Degree General Education Requirements (18 credits)

ENGL& 101 English Composition

MATH& 141 Precalculus I

PSYC& 100DIV General Psychology, or other transferable social science or humanities course that meets the diversity requirement

COLL 102 College Success for All \*must be taken in first 2 quarters

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone-project, diversity, and computer-literacy requirements.

ENGL& 101	English Composition I	5
PSYC&	General Psychology	5

100DIV		
COLL 102	College Success for All	3
MATH& 141	Precalculus I	5

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other transferable social science or humanities course that meets the diversity requirement*

*COLL 102: must be taken in first 2 quarters*

## Mechatronics Flex 20 Certificate

The Mechatronics Flex 20 Certificate is a special type of program, called a "Co-operative Certificate," in which employees can gain defined skills that help meet their professional talent needs by choosing the exact skillset desired in the form of variable college credit courses (5-20 credits). Employers may offer workers in a Co-Op Certificate Program release time (2 days a week) to attend class and engage in studies. Frequently, employers also help fund tuition and other expenses of participating workers. Degree program prerequisites are waived for certificate students. As such, prospective Flex 20 students must demonstrate current employment in a relevant field in industry, and complete a work-based learning agreement before admission to the program.

### Completion Requirements

#### Prerequisite(s)

Flex 20 students must demonstrate current employment in a relevant field in industry, and complete a work-based learning agreement before admission to the program.

#### Program Course List

Select 5-20 credits from the electives listed below.

MEC 115	DC Circuits	5
MEC 116	AC Circuits	5
MEC 120	Computer Aided Design I	5
MEC 132	Lean Manufacturing	5
MEC 140CL	Computer Programming and Logic	5
MEC 165	Robotics	5
MEC 230	Programmable Control of Fluid Power	5
MEC 235	Programmable Controls in Industrial Networks	5
MEC 240	Motors, Drives, & Mechanical Transfer Systems	5

**Subtotal: 5-20**

## META Flex 20 Certificate

The META Flex 20 Certificate is a special type of program, called a "Co-operative Certificate," in which employees can gain defined skills that help meet their professional talent needs by choosing the exact skillset desired in the form of variable college credit courses (5-20 credits). Employers may offer workers in a Co-Op Certificate Program release time (2 days a week) to attend class and engage in studies. Frequently, employers also help fund tuition and other expenses of participating workers. Degree program prerequisites are waived for certificate students. As such, prospective META Flex 20 students must demonstrate current employment in a relevant field in industry, have 90 college credits, and complete a work-based learning agreement before admission to the program.

### Completion Requirements

#### Prerequisite(s)

prospective META Flex 20 students must demonstrate current employment in a relevant field in industry, have 90 college credits, and complete a work-based learning agreement before admission to the program.

#### Program Course List

Select 5-20 credits from the following list of electives:

MEC 300	The Industrial Internet of Things	5
MEC 310	Environmentally Sustainable Manufacturing	5
MEC 320	Fixtures and Workflow	5
MEC 330	Programming for Industry 4.0	5
MEC 361	Process Control	5
MEC 362	Advanced Sensors and Actuators	5
MEC 363	AI and Data Analytics	5
MEC 381	Automation Evaluation and Implementation	5
MEC 382	Machine Vision	5
MEC 383	Dynamics of Machinery and Kinematics	5
MEC 402	Robotic Integration	5
MEC 403	Simulation, Emulation and Digital Twins	5

**Subtotal: 5-20**

## Medical Assistant

### Medical Assistant - Associate of Applied Technology Degree

Medical Assistant Program (MAP) graduates may assume positions as multi-skilled allied health professionals who perform a wide range of duties in physicians' offices, clinics, and other outpatient health care settings.

The MAP curriculum includes anatomy and physiology, medical terminology, medical law and ethics, oral and written communication, administrative procedures, financial record keeping, mathematics, insurance billing and medical coding, basic office diagnostic procedures, principles of pharmacology and medication administration, venipuncture, medical and surgical asepsis, and microbiology.

Students are trained in administrative and clinical procedures performed in physicians' offices and/or clinics. Graduates from this program are eligible to take the national certification exam through the American Association of Medical Assistants (AAMA), which is one of the nation wide authorized exams for certification through Washington State. Training will include, but is not limited to, professional telephone techniques, scheduling appointments, interviewing and educating patients, scheduling hospital admissions for patients, maintaining financial records and files, completing insurance forms, preparing and maintaining employees' payroll records, assisting patients in preparing for examinations and procedures, cleaning and sterilizing instruments and equipment, collecting specimens, performing electrocardiograms, and assisting physicians with examinations, treatments, procedures, and minor office surgeries.

Included in this program are general education courses in math, public speaking, and sociology. These courses broaden students' foundation knowledge base and increase their success in the program. Students must earn a solid "C" (no C-) grade or better in these general education courses to graduate from the MAP.

Additional courses included in the MAP consist of the following: CAH 102 Medical Terminology, COLL 102 College Success for All and CAH 105 Computer Applications. Students must earn a "C" (no C-) grade or better in CAH 102, COLL 102, and CAH 105 courses to satisfy graduation requirements. No MAP course may be taken more than twice. All courses with the MAP prefix must be passed with a "B" (no B-) or better and pass .all

program accredited psychomotor and affective competencies with at least 80%.

Students will receive HIV/AIDS and HIPAA certifications through the program but must obtain American Heart Association – CPR for Health Care Provider/Professional Card external to the program and prior to externship.

Externship hours will vary and will be completed during the day hours for both day and evening students. Although Clover Park Technical College cannot guarantee a specific site placement, students' preferences and needs are taken into consideration. Additionally, with the assistance of the instructors and/or clinical placement coordinator, students will have the opportunity to choose and/or secure their own externship site if an affiliation agreement with that entity is approved and in place before the first day of externship. Upon completion of the MAP, students will graduate with an Associate of Applied Technology.

#### Program Accreditation

The Medical Assistant Program at Clover Park Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of Medical Assisting Education Review Board (MAERB):

Commission on Accreditation of Allied Health Education Programs  
9355 113th Street North, #7709  
Seminole, FL 33775  
727-210-2350

#### Physical Activity Requirements

This occupation requires medium physical activity and lifting/handling objects weighing 10-25 lbs. (occasionally up to 50 lbs.) and handling body fluids. Medical Assistants are often standing for long periods of time. For safety and protection of patients, student medical assistants must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations. Students must be able to safely assist a patient in moving between an exam room table, chair, wheelchair, and/or walker.

#### Employability Requirements

Graduates must meet the state application requirements for medical assistants, which include, but are not limited to: passing one of the authorized national certification exams, seven hours of AIDS education and training as required under WAC 246-824, current cardiopulmonary resuscitation (CPR), and no disqualifying crimes on a

criminal background check.

**Program Length**

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Day program: Summer quarter.

Evening program: Winter quarter.

Once a student begins in either the day or evening program section, they will be unable to change sections without authorization from an instructor. Changing program sections depends on available space.

**Program Outcomes**

- Apply law and ethics relating to the healthcare field focusing on components specific to medical assistants.
- Use medical terminology in order to communicate effectively with culturally diverse patients and team members.
- Use specialized software for the healthcare environment.
- Perform a variety of clinical and administrative tasks safely and effectively according to program accreditation.
- Use the knowledge of the credentialing process to apply for an interim medical assistant certification.
- Create medical records that comply with state and federal laws.

**Completion Requirements**

**Prerequisite(s)**

Students are highly recommended to attend an information session/advising meeting with an instructor before or once they have registered for MAP 108.

Students are required to show proof of a high school diploma or high school equivalency diploma upon entry into the MAP. All Medical Assistant Program required courses in quarters one through four and general education courses must be successfully completed before entering the final quarter of the program..

Requirements may vary based upon the requirements of the clinical site(s). To facilitate placements, all immunizations and other site-specific requirements must be completed and submitted at least three (3) months before clinicals are scheduled to start. Immunizations includes, but are not limited to: Tetanus/Diphtheria, Hepatitis B, Measles/Mumps/Rubella, Tuberculosis skin testing, Flu, and Varicella, as required by contracts with

clinical facilities and CDC recommendations. Please note that these may change without notice as clinical facilities and the Center for Disease Control (CDC) change their requirements.

In order to participate in the externship, students must receive a “No Record On File” report related to crimes against persons from the Washington State Patrol and/or a Criminal Background Check. A non-refundable fee is charged to each student for the background check. Students must also meet the requirements for the facility that they are assigned to. These requirements may include, but are not limited to, a drug and/or smoking screening and/or policy(ies). Students are required to carry personal health/medical insurance throughout their clinical rotations.

Quarterly-based insurance for students may be purchased. Further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

**Program Course List**

CAH 102	Medical Terminology I	5
CAH 105CL	Computer Applications	5
COLL 102	College Success for All	3
MAP 108	Introduction to Medical Assisting	4
MAP 121	Body Systems Theory 101	4
MAP 124	Body Systems Applications 101	3
MAP 146	Body Systems Applications 102	4
MAP 147	Body Systems Theory 102	4
MAP 164	Body Systems Applications 103	4
MAP 166	Body Systems Theory 103	4
MAP 176	Computers for the Healthcare Setting	5
MAP 178	Health Insurance & Coding	6
MAP 181	Financial Practices	4
MAP 182	Patient Reception & Legal Components	4
MAP 184	Medical Records Management	3
MAP 209	Externship Preparation 1	3
MAP 212	Externship Preparation 2	3
MAP 215	Externship	8
MAP 222	Community Employment Opportunities & Locations	1
CMST& 220	Public Speaking	5
MAT 108	Math for Health Occupations	5
SOC&	Introduction to Sociology	5



101DIV

**Subtotal: 92**

## Medical Histology Technician

### Medical Histology Technician - Associate of Applied Technology Degree

Trains students to prepare thin sections of human tissue for microscopic examination.

Prepares students for entry-level employment as medical histology technicians in clinical, veterinary, and research laboratories. This program also serves as a pathway for career advancement in specialized areas in the medical histotechnology profession.

The Medical Histology Technician program stresses practical application and the development of job skills, as well as medical histotechnology theory.

Designed to enhance students' abilities to reason, understand, and apply correct principles of medical histotechnology by teaching analytical and critical thinking skills, the Medical Histology Technician program prepares students to sit for the National Board Certification Exam.

New entrants into the field, as well as incumbent workers who have not had the advantage of receiving a strong theoretical foundation, will find this course of study beneficial. Students will be involved in classroom/ lab work for the first three quarters of the program, with the remaining time spent in a clinical rotation.

Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

May be required to travel to the greater Seattle for summer clinical experience, expenses for commuting and parking is the responsibility of the student.

Granting of degree is not contingent upon the students passing any type of external certification or licensure examination.

#### **Program Accreditation**

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences:

5600 N. River Road

Suite 720  
Rosemont, IL 60018  
773-714-8880

#### **Employability Requirements**

Graduates are required to pass a national certification exam prior to employment. Students must pass a background check prior to being allowed to perform clinical rotations. Students are required to maintain immunizations and acquire an American Health Association CPR Health Care Provider card.

Be aware that many histology laboratories function 24 hours a day, 7 days a week. This is not a 9 am to 5 pm career.

#### **Physical Activity Requirement**

Move freely and safely about the laboratory. Reach laboratory bench tops and shelves. Be able to sit and/or stand for long periods of time, up to 6-7 hours. Use electronic keyboard, computer and calculator with ease. Use clinical grade binocular microscope to evaluate tissue section and ultra-structure of the cell. Characterize color and odor. Histology requires vast memorization skills. Lift and move up to 50 lbs. Have full use of hands and fingers with the ability to manipulate small tools. Be able to perform repetitive movements especially hands, fingers, elbows and shoulders. Those who experience prior injury in shoulder and/or back issues should consult their physician. Twisting, leaning and lifting are required. Read and comprehend technical and professional materials, texts, numbers and graphs displayed in print or monitor. Comprehend three dimensional space, specifically peripheral vision. Have adequate breathing ability.

#### **Program Length**

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### **Admission Dates**

Fall and winter quarter.

#### **Completion Requirements**

##### **Prerequisite(s)**

Before starting the program, students must have a high school diploma or high school equivalency diploma and complete all the general education courses.

Histology Technicians rely heavily on color appearance.

Each student will need to successfully take a color blindness self-test. Please contact your advisor or instructor for details.

In order to participate in the clinical aspect of the program, students must receive a “No Record On File” Report related to crimes against persons on a criminal background check. They must obtain CPR certification and have current immunizations or laboratory verification of immune status, which includes, but is not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations is required by the last day of class in fall quarter, without exception. Students are required to carry personal health/medical insurance throughout their clinical rotations. Quarterly insurance for students may be purchased; further information is available through the Advising and Counseling Office. No student will be allowed at a clinical site without proof of insurance.

Our program advisory committee and area clinical sites have identified the following attributes of a successful Histology student:

Maintain a professional appearance and attitude at all times

Be willing to accept the challenges of the program and dedicate the year to studying, many hours of studying above and beyond program hours is necessary

Recognize and accept the frustration level in learning new skills

Accept constructive criticism and feedback without anger or hostility

Maintain the physical and emotional challenges of the program

Ability to complete the required volunteer hours above and beyond the program hours.

This program requires that the following general education courses be completed prior to the beginning of the first quarter of Histology courses. These general education courses are BIOL 175 (or BIOL 241 and 242), CHEM 110 (or CHEM 121), and COLL 102. These general education courses must be completed with a grade of “C” (2.0) higher prior to enrollment in the Histology classes.

BIOL/CHEM must be completed within the last five years.

<b>Prehistology General Education Courses</b>		
BIOL& 175	Human Biology w/Lab	5
	Or	
BIOL& 241	Human A & P I	5
	And	
BIOL& 242	Human A & P II	5
CHEM& 110	Chemical Concepts w/Lab	5
	Or	
CHEM& 121	Intro to Chemistry	5
COLL 102	College Success for All	3
		<b>Subtotal: 13</b>

<b>Technical Course Requirements</b>		
HISTO 105	Orientation to the Histology Laboratory	2
HISTO 110	Histotechnology I	10
HISTO 115	Histotechnology Lab I	5
HISTO 120	Histotechnology II	10
HISTO 125	Histotechnology Lab II	5
HISTO 130	Math Applications for Histology	3
HISTO 135	Histotechnology III	10
HISTO 140	Histotechnology Lab III	5
HISTO 145	Immunohistochemistry	5
HISTO 150CAP	Histology Internship	10
HISTO 160	Histology Seminar	5
		<b>Subtotal: 70</b>

<b>AAT Degree Requirements</b>		
	Prerequisites	13
	Technical Course Requirements	70
CAH 102	Medical Terminology I	5
CAH 105CL	Computer Applications	5
ENGL& 101	English Composition I	5
MAT 108	Math for Health Occupations	5
	Or	
MATH& 146	Introduction to Statistics	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
		<b>Subtotal: 108</b>

## Medical Laboratory Technician

### Medical Laboratory Technician - Associate of Applied Technology Degree

Medical laboratory technicians (MLT) are vital healthcare detectives, uncovering and providing laboratory information from laboratory analyses of blood, body fluids and other biological specimens which assist physicians in patient diagnosis, treatment and monitoring of disease. These professionals use applied science and critical thinking skills to test, analyze and interpret laboratory results.

Clover Park Technical College offers a two-year Medical Laboratory Technology (MLT) program leading to an Associate of Applied Technology degree (AAT). The MLT program includes both theoretical and practical experience in blood collection and processing, hematology, hemostasis, clinical chemistry, microbiology, urinalysis, immunology/serology, and immunohematology. The curriculum includes collecting, processing, and analyzing biological specimens and other substances, principles and methodologies, performance of assays, problem-solving, troubleshooting techniques, significance of clinical procedures and results, principles and practices of quality assessment, for all major areas practiced in the contemporary clinical laboratory.

Clinical courses provide students with real life, hands-on experience performing laboratory tests in local affiliated hospital and laboratories in the surrounding area where students achieve competency in all skills required for entry-level positions into the profession.

Enrollment is limited to fourteen on-campus students. A distance learning option is available for students who have a guaranteed sponsorship at a clinical laboratory. This requires a legal agreement between the college and the laboratory. Contact the program director or MLT student advisor, Kevin Kildun, for additional information. Students must complete all general education requirements to be eligible to register for MLT courses. Registration is “first come, first served”.

#### Clinical Requirements

Students may be required to perform rotations on evening shift. Potential students must have the ability to discern colors. Students will be screened for color blindness. Individuals with complete color blindness will not be allowed into the program.

To participate in the clinical aspect of the program students must have

- dependable transportation to travel to clinical sites.
- a “No Record On File” Report related to crimes against persons on a criminal background check.
- CPR certification which must be valid through completion of clinical courses.
- proof of current immunizations or laboratory verification of immune status, which includes, but is not limited to, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, Varicella and Covid, as required by contracts with clinical facilities. Proof of immunizations is required by the first day of the quarter you start the program.
- proof of personal health/medical insurance that will be active throughout the clinical rotations.

#### Physical Requirements

Move freely and safely about the laboratory. Have full, stable use of hands and fingers with the ability to manipulate blood collection equipment, pipette minute amounts of liquid, and operate equipment. Read and comprehend technical and professional materials, texts, numbers and graphs displayed in print or monitor. Use electronic keyboard, computer and calculator with ease. Use clinical grade binocular microscope to evaluate clinical samples. Characterize color and odor. Reach laboratory bench tops and shelves. Be able to sit and/or stand for long periods of time, up to 6-7 hours. Be able to safely lift and carry objects up to 25 lbs. and stand for long periods of time

#### Program Length

The program is approximately seven quarter, two quarters of general education requirements and five quarters of MLT specific courses. The student may wish to spread out the general education courses into more quarters. The general education courses must be completed prior to registering for the first MLT course. The MLT program is a combination of on-line, classroom, laboratory and clinical experiences which is completed in five quarters. Once the student enrolls in the MLT program it is full time for the five quarters.

#### Admission Date

Summer Quarter.

#### Employability Requirements

Graduates may be required to pass a national certification exam prior to employment.

Most MLTs work in a hospital laboratory, doctor’s office laboratory, or clinic, although there are many opportunities available to work in public health, research, or reference laboratory.

Many clinical laboratories function 24 hours a day, 7 days a week. Employers staff the laboratory for three different shifts, days, evenings and nights. Other types of clinical labs, such as doctor's offices, offer traditional schedules, Monday-Friday, 8am to 5pm.

**Completion Requirements**

All courses must be completed with a "C" (2.0) or higher.

**Program Course List**

COLL 102	College Success for All	3
CAH 110	Introduction to Medical Laboratory Technology	2
BIOL& 160	General Biology w/Lab	5
MATH& 146	Introduction to Statistics	5
	Or	
	100-level math class	5
PSYC& 100DIV	General Psychology	5
	Or	
	Any college-level Social Science or Humanities course that meets the diversity requirement	5
	Computer Literacy Requirement	3
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
CHEM& 110	Chemical Concepts w/Lab	5
	Or	
	Any college-level lab-based chemistry class	5
MLT 206	Immunology	6
MLT 209	Phlebotomy/Processing	4
MLT 230	Urinalysis & Body Fluids	6
MLT 225	Hematology & Coagulation	8
MLT 219	Immunohematology	8
MLT 223	Clinical Chemistry	6
MLT 226	Clinical Microbiology	6
MLT 231	Clinical Immunohematology	5
MLT 238	Clinical Experience I	11
MLT 242	Clinical Experience II	6
MLT 246	Clinical Experience III	6
	<b>Subtotal: 105</b>	

1. *Computer Literacy Requirements: Complete an approved computer literacy course or successfully pass the computer literacy exam.*
2. *Before starting the MLT classes, students must complete all the general education courses required for the degree with a “C” (2.0) or better.*

## Network Operations and System Security

### Bachelor of Applied Science in Cybersecurity Degree

CPTC’s Bachelor of Applied Science in Cybersecurity (BAS-C) degree has been designed to meet the needs of students who want to become cybersecurity practitioners. Graduates would be candidates for positions as an Information System Security Officer, Penetration Tester, or Security Analyst.

In the BAS-C program, the approach to learning cybersecurity uses hands on tools in a realistic, practical context. Students will graduate with a practical understanding of cybersecurity concepts as well as experience with a current set of tools.

This degree is offered in a hybrid format with weekend meetings to accommodate working adults.

**Program Length**

A typical full-time student will complete the program in an estimate of 18 months. Half-time students should anticipate completion in an estimated 36 months. Full time students should plan to dedicate 45 hours per week to the program.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

**Admission to the Program**

Admission to the program may occur when the following can be documented:

- Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with a minimum GPA of 2.3. **OR**

- An earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited institution with a minimum 2.3 GPA and proof of enrollment in the Cybersecurity bridge technical bridge courses **OR**
- An appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.
- 5 college-level credits in English Composition (ENGL& 101 or higher with a minimum grade of 2.0).
- 5 college-level credits in a transferable social science course.

**Admission to the Junior Year**

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 4 credits of computer networking coursework.
- 4 credits of Windows Server coursework.
- 4 credits of Linux operating system coursework.
- 4 credits of cybersecurity coursework.
- 4 credits of computer programming.
- 8 credits of Computer Support coursework.

Once admitted to the program, the following must be documented before students are considered to be at junior level standing (in addition to the required English Composition and Social Sciences coursework required for program admission). These requirements can be satisfied by coursework completed before or after admission to the BAS-C program, and may be taken before or concurrently with upper-level BAS classes.

- 5 college-level credits in a transferrable humanities subject.
- 5 credits in any college-level lower division General Education courses: English Composition, Social Science, Humanities, or Natural Science

**Graduation Requirements**

To successfully complete the degree, students must maintain a minimum grade of 2.0 in all coursework.

**Second Baccalaureate Degree General Education Requirements**

Applicants who have already earned a baccalaureate degree from an accredited college or university may be able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

Students must still complete program-specific general education degree requirements if not otherwise satisfied. The program-specific general education requirements in the BAS-C degree are listed below:

- Professional Ethics or equivalent
- Project Management
- Statistics

**Program Course List**

NOS 310	Cyber Threat and Research	5
NOS 315	Risk Assessment and Vulnerability Management	5
NOS 320	Securing Database Management Systems	5
NOS 325	Cloud Security	5
NOS 330	Vulnerability Assessment	5
NOS 335	Network Intrusion Detection	5
NOS 340	Penetration Testing	5
NOS 345	Incident Response	5
NOS 350	Cybersecurity Professional Portfolio	2
NOS 355	Cybersecurity Architecture	3
	Plus 5 credits from the list of Applied Project courses below	5
NOS 411	Incident Response Project Or	5
NOS 412	Penetration Testing Project Or	5
NOS 413	Network Intrusion Analysis Project Or	5
NOS 414	Cloud Security Project Or	5
NOS 415	Industrial Control System Security Directed Project	5
NOS 420	Capstone Project	5
ENG 310	Business Communications	5
PHIL 310DIV	Professional Ethics	5
MATH& 146	Introduction to Statistics	5

BUS 310	Project Management	5
PSYC 311DIV	Industrial & Organizational Psychology	5
ENGL& 235	Technical Writing	5
	Any Lab-Based Science	5
<b>Subtotal: 90</b>		

**NOTE:**

*If MATH 146 has already been completed upon admission into the program, another college-level, transferable general education course is required.*

**Lab-based Science Course Options**

BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
GEOL& 110	Environmental Geology with Lab	5
PHYS& 114	General Physics I with Lab	5

## Network Operations and Systems Security Associate of Applied Technology Degree / Associate in Applied Science – T Degree

The NOSS program prepares students to pursue careers in a variety of entry- to mid-level positions including, but not limited to, help desk, network system administration, and cybersecurity. Our instructors prepare students for careers involving the protection of information on computers and networks against unauthorized access or modification of information and the denial of service to authorized users. Includes those security measures, both physical and virtual, necessary to detect, document, and counter such threats. Curriculum content includes basic and advanced computer and networking skills, physical and virtual security processes, and procedures, and introduction to security management, planning, and recovery. The NOSS AAT/AAS-T program focuses primarily on the technical and problem-solving skills associated with PC and network management and cyber-security implementation but adds hands-on experience building computer and network systems. Additional skills include administration, configuration, and security for Cisco, Linux, and Microsoft products. Our focus also includes ethical hacking and

prevention, assessing the security needs of computer networking systems, and developing safeguard solutions for computer and information-system infrastructures and countermeasures. The AAT or AAS-T degree is earned by completing the technical program requirements and general education requirements, including courses that meet the capstone project, diversity, and computer literacy requirements. The program includes preparing students for the CompTIA A+, Security+, Linux+, Cloud+, Cisco CCNA, and Information Technology Specialist certifications. and internship work experience. Employers include business and industrial firms, financial institutions, government agencies, consulting firms, software developers, health providers, and Internet service providers. Innovations in computer technology continue to rapidly change and expand the computer security field. Therefore, the following courses of study may be subject to change to offer students training based on current industry standards.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Before completion of the first quarter, a student must provide documentation of a background check with the Washington State Patrol.

**Program Course List**

NOS 106CL	IT Fundamentals	8
NOS 110	Cyber Security Fundamentals	4
NOS 115	Introduction to Networking	4
NOS 126	Desktop Support	8
NOS 130	Server OS Installation and Configuration	4
NOS 135	Scripting for Network Admins	4
NOS 140	Linux I	4
NOS 145	Administering Windows Server OS	4
NOS 150	Virtualization and Cloud Technologies	4
NOS 155	Linux II	4
NOS 161	Offensive Server Security	4
NOS 201	Windows Hybrid Server	4
NOS 205	Implementing Systems Security	4

NOS 210	Digital Forensics and Investigations	4
NOS 221	Advanced Networking	9
NOS 241	Internship	6
<b>Subtotal: 79</b>		

NOSS Program Option: See list below

<b>AAT Degree Requirements</b>		
	Technical Course Requirements	79
	AAT General Education Requirements	18
<b>Subtotal: 97</b>		

AAT Degree General Education Requirements: See list below

<b>AAS-T Degree Requirements</b>		
	Technical Course Requirements	79
	AAS-T General Education Requirements	23
<b>Subtotal: 102</b>		

AAS-T Degree General Education Requirements: See list below.

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two-degree options in this program are the Associate of Applied Technology (AAT) or the Associate in Applied Science-T (AAS-T). The different requirements for each degree are listed below:

<b>Network Operations &amp; Systems Security AAT Degree General Education Requirements (18 credits):</b>		
ENGL& 101	English Composition I	5
Or		
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
Or		
PSYC& 100DIV	General Psychology	5
Or		
SOC& 101DIV	Introduction to Sociology	5
Or		
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
<b>Network Operations &amp; Systems Security AAS-T Degree</b>		

**General Education Requirements (23 credits):**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science;

Choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100		5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101		5

3 credits in College Success:  
 COLL 102 College Success for All 3

## Linux Administrator Certificate

This certificate is designed to upgrade an entry-level computer support professional's skill to begin a career as a Linux administrator in an enterprise environment. A Linux Administrator performs a wide range of planning, configuration, and support tasks required to administer Linux client and server operating systems. Students will complete NOS 140 and NOS 155 (Linux I and Linux II) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives support the CompTIA Linux+ exam, though this is not a certification preparation program

Courses in this certificate transfer towards the Network Operations & Security AAT or AAS-T degree program.

### Program Length

This program is approximately two-quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Students should have some basic computer knowledge.

### Program Course List

NOS 140	Linux I	4
NOS 155	Linux II	4

**Subtotal: 8**

## Network Operations & Systems Security Professional Certificate

This certificate is designed to prepare students for entry-level careers involving the protection of computers, networks, and information systems against unauthorized access or modification of information, and the denial of service to authorized users. Includes those security measures, both physical and virtual, necessary to detect, document, and counter such threats. Curriculum content includes basic computer and networking skills, physical

and virtual security processes and procedures, and introduction to security management, planning, and recovery. The program includes preparing students for the CompTIA A+, Security+, Linux+, and Information Technology Specialist certification examinations. Employers include business and industrial firms, financial institutions, government agencies, consulting firms, software developers, health providers, and Internet service providers.

Courses in this certificate transfer towards the Network Operations & Systems Security (NOSS) AAT or AAS-T

### Program Length

This program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Before completion of the first quarter, a student must provide documentation of a background check with Washington State Patrol.

### Program Course List

NOS 106CL	IT Fundamentals	8
NOS 110	Cyber Security Fundamentals	4
NOS 115	Introduction to Networking	4
NOS 126	Desktop Support	8
NOS 130	Server OS Installation and Configuration	4
NOS 135	Scripting for Network Admins	4
NOS 140	Linux I	4
NOS 145	Administering Windows Server OS	4
NOS 150	Virtualization and Cloud Technologies	4
NOS 155	Linux II	4
NOS 161	Offensive Server Security	4
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC&	General Psychology	5



100DIV		
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3

## Computer Help Desk Technician Certificate

This certificate is designed to prepare students for entry-level careers supporting computer users as a Computer Help Desk Technician. A Computer Help Desk Technician performs a wide range of support tasks for the computer user, including computer configuration, image deployment, troubleshooting, and training. Students will complete NOS 126 Desktop Support in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives support the Microsoft Certified Solution Associate exam standards for the current desktop operating system, though this is not a certification preparation program.

Courses in this certificate transfer towards the Network Operations & Systems Security AAT or AAS-T degree program.

### Program Length

This program is approximately one-quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Students should be familiar with navigating current Windows desktop operating systems.

Program Course List		
NOS 126	Desktop Support	8
		<b>Subtotal: 8</b>

## Server Administrator Certificate

This certificate is designed to upgrade an entry-level

computer support professional's skill to begin a career as a Server Administrator in an enterprise environment. A Server Administrator performs a wide range of planning, configuration, and support tasks required to administer a server(s). Students will complete NOS 130 (Server OS Installation and Configuration) and NOS 145 (Administering Windows Server OS) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives support the Microsoft Certified Solution Associate exam standards for two of the three required exams for the current server operating system, though this is not a certification preparation program

Courses in this certificate transfer towards the Network Operations & Systems Security (NOSS) AAT or AAS-T degree program.

### Program Length

This program is approximately two-quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, Fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

Students should be familiar with navigating current Windows desktop operating systems.

Program Course List		
NOS 130	Server OS Installation and Configuration	4
NOS 145	Administering Windows Server OS	4

**Subtotal: 8**

## Computer Support Technician Certificate

This certificate is designed to prepare students for entry-level careers supporting computer users as a Computer Support Technician. A Computer Support Technician performs a wide range of hands-on tasks for the computer user, including computer installation, maintenance, troubleshooting, repair, retirement, and training. Students will complete NOS 100 and NOS 105 (IT Fundamentals I and II) in a hybrid learning environment. Students will typically spend three or more hours outside the classroom

doing online learning for every hour spent in the classroom. They should budget at least 10 hours per week for homework. The courses' learning objectives roughly parallel those of the CompTIA A+ certification exam objective, though this is not an exam preparation program. Courses in this certificate transfer towards the Network Operations & Systems Security AAT or AAS-T degree program.

**Program Length**

This program is approximately one-quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall, winter, spring, summer quarters.

**Completion Requirements**

**Prerequisite(s)**

Students should be able to use a computer to read the courseware online and be able to send an email.

**Program Course List**

NOS 106CL	IT Fundamentals	8
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**Network Administrator Certificate**

Clover Park Technical College is a member of the Cisco Networking Academy community in 165 different countries. Our Cisco program delivers a comprehensive, 21st-century learning experience to help students develop the foundational information and communication technology skills needed to design, build, secure, and manage networks. Our program also helps students develop career skills, such as problem-solving, collaboration, and critical thinking. This certificate uses a blended-learning model that combines face-to-face teaching with engaging online content and hands-on learning activities to help students prepare for entry-level and advanced careers; and higher education in engineering, computer science, information systems, and related fields. The courses' learning objectives support the Cisco Certified Network Associate exam standards for the desktop and server operating systems, though this is not a certification preparation program. As networking technologies bring new economic and social opportunities to communities throughout the world, businesses, non-profits, hospitals, schools, and government organizations are experiencing growing demand for networking professionals to design, build, maintain, and secure their networks. Graduates are qualified to work as field-service

and help-desk technicians, network support technicians, IT technicians and administrators, network security support technicians, network engineers, and administrators.

**Program Length**

This program is approximately two-quarters long, depending on the time students need to satisfactorily complete all graduation requirements. All the courses in this certificate count toward the Network Operations & Systems Security (NOSS) AAT or AAS-T degree program.

**Admission Dates**

Summer, Fall, Winter, and Spring quarters.

**Completion Requirements**

**Prerequisite(s)**

Basic computer and network knowledge.

**Program Course List**

COLL 102	College Success for All	3
NOS 115	Introduction to Networking	4
NOS 126	Desktop Support	8
NOS 221	Advanced Networking	9
NOS 201	Windows Hybrid Server	4

**Subtotal: 28**

*Note: NOS 115 is articulated courses with high schools for dual enrollment.*

**Nondestructive Testing**

**Nondestructive Testing - Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

The Nondestructive Testing (NDT) program at Clover Park Technical College provides training in a variety of analysis techniques used in industry to evaluate the properties of a material or structure without causing damage. Because NDT does not impair the usefulness of the object being inspected, it is a valuable process used in fields such as construction, manufacturing, civil engineering, and transportation. Nondestructive testing techniques are used to examine structures or vehicles such as aircraft, trains, nuclear reactors, bridges, dams, and pipelines.

This program prepares graduates to become active and successful professionals in nondestructive testing in a wide range of industries. Students will explore and receive hands-on technical training in blueprint reading, codes and

specifications, composite fabrication, assembly and repair, materials, and the manufacturing process. Training will also include the major methods of NDT, such as visual and optical, magnetic particle, liquid penetrant, radiographic, ultrasonic and eddy current testing, along with an overview of other methods. Students will be introduced to advanced technologies, such as ultrasonics (phased array), and radiography (digital detector array DDA and computerized radiography CR). Successful graduates are prepared with technical skills for entry-level positions, such as quality control technicians, NDT technicians, engineering technicians, and NDT equipment representatives.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

This program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Correlate the discontinuities specific to each manufacturing process with the non-destructive testing method or methods used to detect, interpret, and evaluate them.
- Perform the basic setup and calibration of non-destructive testing equipment according to referenced codes, standards, and specifications.
- Create a non-destructive testing technique in which known defects within any assigned part or assembly are inspected, interpreted, and evaluated in accordance with referenced codes, standards, and specifications.
- Analyze inherent and service induced discontinuities and defects for differentiation and disposition with various precision measurement tools.
- Create technical reports documenting the results of their inspection findings.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 or equivalent.  
 Successful completion of MAT 099 by the end of the first quarter of the program or instructor’s permission.

**Program Course List**

MS 123	Fundamentals of Welding for the Non-Welding Major	5
MS 126	Fundamentals of Composites for the Non-Composites Technician	4
MS 131	Blueprint Reading Fundamentals	3
NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 120	Visual and Optical Testing	5
NDT 121	Materials and Processes for NDT II	5
NDT 125	Magnetic Particle Testing	5
NDT 130	Liquid Penetrant Testing	5
NDT 140	Eddy Current Testing I	5
NDT 150	Ultrasonic Testing I	5
NDT 160	Radiographic Testing I	5
NDT 170	Eddy Current Testing II	5
NDT 180	Ultrasonic Testing II	5
NDT 185	Physics for NDT Professionals	5
NDT 190	Radiographic Testing II	5
NDT 210	Eddy Current Testing III	5
NDT 220	Ultrasonic Testing III	5
NDT 230	Radiographic Testing III	5
NDT 240CAP	Capstone Project	3
	Or	
NDT 250	NDT Internship	1-11
	<b>Subtotal:</b>	<b>95</b>

**AAT Degree Requirements**

Technical Course Requirements	95
AAT General Education Requirements	18
Computer Literacy	3
<b>Subtotal:</b>	<b>116</b>

AAT Degree General Education Requirements: See list below

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**AAS-T Degree Requirements**

Technical Course Requirements	95
AAS-T General Education Requirements	23
Computer Literacy	3
<b>Subtotal:</b>	<b>121</b>

AAS-T Degree General Education Requirements: See list

below

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam*

**General Degree Requirements**

AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

5 credits in communication:

ENGL& 101	English Composition I	5
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5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

5 credits in social science, humanities, or science

choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5

BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5

3 credits in College Success:

COLL 102	College Success for All	3
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**Eddy Current Testing Certificate**

This certificate provides students with foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of eddy current inspection. Eddy current inspection applies electrical currents to an object to create electromagnetic fields. This type of testing can detect manufacturing defects and corrosion damage or cracking for many nonmagnetic metals and alloys.

**Program Length**

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Instructor's permission.

**Program Outcomes**

- Calculate the optimum frequency when creating a technique for a given eddy current application.
- Choose the optimum probe when creating a technique for a given eddy current application.
- Determine the optimum filters when creating a technique for a given eddy current application.
- Choose or develop a standard when creating a technique for a given eddy current application in accordance with referenced codes, standards, and specifications.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of NDT 185 prior to enrolling in NDT 140. NDT 185 requires MAT 099 as a prerequisite. Also successful completion of ENG 091 or equivalent.

**Program Course List**

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 121	Materials and Processes for NDT II	5
NDT 140	Eddy Current Testing I	5
NDT 170	Eddy Current Testing II	5
NDT 210	Eddy Current Testing III	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

**Magnetic Particle and Liquid Penetrant Testing Certificate**

Provides foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT methods of magnetic particle inspection, liquid penetrant inspection, and visual inspection.

**Program Length**

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Instructor’s permission

**Program Outcomes**

- Choose equipment of a given liquid penetrant or magnetic particle field inspection per ASTM Standards E1417 and E1444 respectively.
- Inspect parts for discontinuities using liquid penetrant or magnetic particle methods per ASTM Standards E1417 and E1444 respectively.
- Use visible or ultraviolet light to measure and determine if discontinuities are relevant or non-relevant using liquid penetrant or magnetic particle methods per ASTM Standard E1417 or E1444 respectively.
- Learn to interpret and evaluate relevant discontinuities to acceptance specifications.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of ENG 091 or equivalent and successful completion of MAT 092 or equivalent by the end of the first quarter of the program.

**Program Course List**

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 120	Visual and Optical Testing	5
NDT 121	Materials and Processes for NDT II	5
NDT 125	Magnetic Particle Testing	5
NDT 130	Liquid Penetrant Testing	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

**Radiographic Testing Certificate**

Provides foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of radiographic inspection. Radiography uses X-rays or gamma rays to show defects that might otherwise be invisible. A vast array of material can be examined in this efficient and reliable way, ranging from tiny electronic components to 20-foot freestanding concrete slabs.

**Program Length**

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Instructor’s permission.

**Program Outcomes**

- Perform the process control checks for computed radiography per ASTM Standard E2445.
- Perform all radiographic film process control checks in accordance with referenced record logs, codes, standards, and specifications.
- Perform all radiographic safety procedures in accordance with referenced record logs, codes, standards, and specifications.
- Produce a film image and a computed radiography image that meet all image qualifications in accordance with referenced codes, standards, and specifications.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of NDT 185 prior to enrolling in NDT 160. NDT 185 requires MAT 099 as a prerequisite. Also, successful completion of ENG 091 or equivalent.

**Program Course List**

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 121	Materials and Processes for NDT II	5
NDT 160	Radiographic Testing I	5
NDT 190	Radiographic Testing II	5
NDT 230	Radiographic Testing III	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

**Ultrasonic Testing Certificate**

Provides students with foundational knowledge related to nondestructive testing (NDT) and offers the opportunity to gain hands-on training in the NDT method of ultrasonic testing. With this method, NDT inspectors need access to only one side of a material. A transducer sends the ultrasound through the sample and the inner wall of a defect surface will send the wave bouncing back. Ultrasonic testing is a portable and efficient way to measure thickness, detect corrosion, and examine groove welds in many materials.

**Program Length**

The certificate program is two-to-three quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Instructor’s permission.

**Program Outcomes**

- Create a technique specific to an ultrasonic bond testing application in accordance with referenced codes, standards, and applications.
- Develop a standard when creating a technique for a given ultrasonic application in accordance with referenced codes, standards, and specifications.
- Determine the location and size of any relevant indication found in any ultrasonic application per the accuracy outlined in accordance with referenced codes, standards, and specifications.
- Differentiate one primary ultrasonic test application and at least one secondary ultrasonic test application to detect, interpret, and evaluate any discontinuity found in any test.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of NDT 185 prior to enrolling in NDT 140. NDT 185 requires MAT 099 as a prerequisite. Also, successful completion of ENG 091 or equivalent.

**Program Course List**

NDT 108	Introduction to NDT	5
NDT 113	Material and Processes for NDT I	5
NDT 121	Materials and Processes for NDT II	5
NDT 150	Ultrasonic Testing I	5
NDT 180	Ultrasonic Testing II	5
NDT 220	Ultrasonic Testing III	5
NDT 240CAP	Capstone Project	3
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

**Nursing**

**ADN Degree**

Thank you for your interest in the LPN-RN Transition Program at Clover Park Technical College. The application process consists of several requirements prior to admission to the program. Please refer to the Nursing Website for additional information regarding specific admissions requirements. Additionally, admission policies are subject to change. The student is advised to keep up to date on any changes that might affect their qualifications for acceptance into the LPN-RN Associate Degree in Nursing program.

**PROGRAM OVERVIEW**

The LPN-RN Transition Pathway leading to an Associate Degree in Nursing prepares Licensed Practical Nurses to transition to the Registered Nurse role. Following successful completion of the pathway, the graduate is eligible to take the NCLEX, state board exam and apply for licensure as a registered nurse. The RN provides patient care independently using critical thinking while utilizing the nursing process. Furthermore, the RN works as a member of the interdisciplinary team when carrying out medical interventions under the general direction of a health care provider. RNs are employed by acute care settings, long-term care facilities, outpatient settings, clinics, schools, and many other places. The RN cares for patients utilizing the full scope of the nursing process, administers medications, treatments, performs skilled nursing procedures, and documents in the patient record.

This program will be offered during the *evening and weekend hours and on a part-time basis.*

### PROGRAM COMPONENTS

The LPN-RN Associate Degree in Nursing Program begins each fall and spring quarter, accepting up to 24 students per admissions cycle. The program consists of five quarters with 38 credits of nursing courses. Students must receive a “C+” or better in all nursing courses to satisfy graduation requirements. Clinical learning experiences are obtained in various health care settings in the community under the guidance of nursing faculty. Clinical experiences are largely scheduled between 5:00 a.m. and 11:30 PM on weekends. The college reserves the right to schedule clinical experiences up to 60 miles from the college as needed to ensure successful completion of program outcomes.

This LPN-RN Transition Program focuses on preparing students to provide individual-centered care through professional nursing practice, focusing on leadership and collaboration through the use of information, technology, safety and communication. Students learn knowledge in the classroom, practice applying this knowledge in the skills laboratory and in clinical settings, including simulation, to ensure safe individual care.

Graduates are eligible to take the NCLEX-RN exam and meet state eligibility requirements, including a criminal background check, in order to apply for licensure. Persons with history of criminal convictions may not be eligible for licensure.

### Physical Activity Requirements

This occupation requires medium physical activity,

handling body fluids, and exposure to infectious diseases. Nurses are often standing for long periods of time. For safety and protection of patients, student nurses must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations.

### Entry Requirements

The following are required to enter the LPN-RN ADN Program:

**1.** An active LPN License

**2.** Pre-requisite Courses: A student must achieve an *average* of a "B-" for all pre-requisite courses. (CPTC courses with an “&” in the course name are transferable to other Washington State educational institutions.) A minimum grade of C (2.0) is required in all transferable (&) General Education coursework

- CHEM& 121 (5 Cr.)
- BIOL& 160 (5 Cr.)
- BIOL& 241 Human A & P 1 w/Lab (5 Cr.)
- BIOL& 242 Human A & P 2 w/Lab (5 Cr.)
- BIOL& 260 Microbiology with lab (5 Cr.)
- ENGL& 101 English Composition I (5 Cr.)
- MATH& 146 Introduction to Stats (5 Cr.)
- NUTR& 101 Nutrition (5 Cr.)
- PSYC& 100DIV General Psychology (5 Cr.)
- PSYC& 200 Lifespan Psychology (developmental psychology) (5 Cr.)

Must achieve a passing grade in COLL 102

- COLL 102 College Success for All (3 Cr.)

**3.** American Heart Association CPR for the Health Care Provider. This includes adult, child, and infant, under the guidelines of the American Heart Association. Online CPR courses are not accepted. Students are required to carry personal health/medical insurance throughout their clinical rotations.

**4.** Proof of immunizations. Please refer to the Nursing Program Website for a list of current required immunizations.

**5.** Additionally, once a student is accepted into the

program, the following is expected:

- Student must receive a “No Record On File” report related to crimes against persons from the Washington State Patrol. A non-refundable fee is charged to each student for the background check.
- Student will upload all clinical documentation, including immunizations into current document management system.
- Student will keep department up to date on any changes related to background checks, address or name changes.

**Admission Dates**

Students will be admitted in Fall and Spring.

If students are taking or have taken prerequisite courses at another educational institution, they must have credits evaluated prior to submitting the application. Students must request an official college transcript be sent to CPTC Enrollment Services for evaluation and complete a transfer credit request form. Mail your official transcript to Clover Park Technical College ATTN: Credential Evaluator.

To apply, please refer to the Nursing Program Website for application timelines and specific details.

**Program Accreditation**

Clover Park Technical College holds pre-accreditation status from the National League for Nursing Commission for Nursing Education Accreditation, located at 2600 Virginia Avenue, NW, Washington, DC, 20037. Holding pre-accreditation status does not guarantee that initial accreditation by NLN CNEA will be received.

**Completion Requirements**

Prerequisite(s)

A mandatory orientation is required prior to admission to the program.

**LPN-RN Transition Program (ADN) Courses**

	Prerequisites	53
NURS 270	Variations in Health and Wellness III	5
NURS 271	Variation in Health and Wellness Lab III	1
NURS 272	Variation in Health and Wellness Clinical/SIM III	4
NURS 273	Variations in Pediatric and Reproductive Health	2

NURS 274	Ethics and Policy in Nursing II	3
NURS 280	Variations in Health and Wellness IV	5
NURS 281	Variations in Health and Wellness Lab IV	1
NURS 282	Variations from Health and Wellness Clinical/SIM IV	4
NURS 285	Transition to Professional Nursing Practice	2
NURS 286	Psychosocial Issues in Nursing II	2
NURS 292	Transition to Nursing Practice Clinical	5
NURS 293	Communication in Healthcare II	3
NURS 295	Professional Nursing Concepts	1

**Subtotal: 91**

**Nursing Assistant Certificate**

The Nursing Assistant Certificate Program prepares students for employment as a basic care provider under the supervision of a professional licensed provider, such as a Registered Nurse. This course will meet the Washington state and Omnibus Budget Reconciliation Act (OBRA) requirements for Nursing Assistant Training.

**Physical Activity Requirements**

This occupation requires medium physical activity and lifting/handling objects, contact with body fluid, exposure to infectious diseases, and standing for long periods of time.

**Employability Requirements**

Upon completion of this course, students will be eligible to take the State Certification Examination - the National Nurse Aide Assessment Program Exam (NNAAP). Graduates must pass the NNAAP exam and meet the state eligibility requirements in order to apply for licensure. Persons with history of criminal convictions may not be eligible for licensure.

**Program Length**

The total number of hours to complete the course is 160 hours. NAC 108 involves 70 hours of nursing assistant theory, which includes HIV/AIDS and CPR. NAC 111 includes 40 hours of nursing skills. NAC 114 includes 50 hours of unit-based clinical experience in a long-term care facility, using the knowledge and skills acquired from NAC 108 and NAC 111. Mandatory attendance is required for all nursing laboratory and clinical days.



For additional inquiries regarding the program or orientation, email Admissions@cptc.edu or call 253-589-5800.

**Admission Dates**

Summer, fall, winter, and spring quarters. Students entering the evening program will be required to attend an I-BEST information session and complete entry and quarterly assessments while enrolled in the program.

**Program Outcomes**

- Perform approved scope of practice skills in various health care settings.
- Apply patient care skills safely in all care settings.
- Use medical terminology in order to communicate effectively with culturally diverse patients and team members.
- Recall the information in order to pass the state examination for nursing assistant certification.

**Completion Requirements**

**Prerequisite(s)**

Students must pass a criminal background check performed by the Washington State Patrol and have a “No Record On File” report with the Department of Social and Health Services. A non-refundable fee is charged to each student for the background check.

Students must have current immunizations including Measles/Mumps/ Rubella, Hepatitis B series, T-dap (within the last 10 years), TWO-PPD/ Tuberculosis Tests (the second PPD should occur 10-14 days after the reading of the first PPD), Seasonal Flu and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations should be submitted the first day of class, unless arrangements have been made with the instructor.

**Program Course List**

NAC 108	Nursing Assistant Theory	5
NAC 111	Nursing Skills Fundamentals	2
NAC 114	Unit Based Clinical Experience	2

**Subtotal: 9**

**Practical Nursing Certificate**

Thank you for your interest in the Practical Nurse Program at Clover Park Technical College. The application process consists of several requirements prior to admission to the program. Please refer to the Nursing Website for additional information regarding specific admissions requirements.

Additionally, admission policies are subject to change. The student is advised to keep up to date on any changes that might affect their qualifications for acceptance into the Practical Nursing program.

**PROGRAM OVERVIEW**

The Practical Nursing Pathway prepares the student for employment as an entry-level practical nurse. Following successful completion of the pathway, the graduate is eligible to take the NCLEX, state board exam and apply for licensure as a licensed practical nurse. The LPN provides basic patient care under the supervision of a registered nurse, ARNP, physician, or other health care professional. LPNs are employed by long-term care facilities, in outpatient settings, clinics, schools, and hospitals. The LPN performs basic patient care, administers medications, performs skilled nursing procedures, and documents in the patient record. During lab classes the student practices nursing skills, some of which are learned by practicing on classmates. The student also participates in a variety of clinical experiences that allow them to apply theoretical knowledge to patient care. During this clinical experience, the student is expected to demonstrate competence in providing safe patient care.

**PROGRAM COMPONENTS**

The Practical Nursing Program begins each fall and spring quarter, accepting up to 60 students per admissions cycle. The program consists of three quarters with 42 credits of nursing courses to complete. Students must receive a “C+” or better in all nursing courses to satisfy graduation requirements. Clinical experiences will occur every quarter and may be scheduled during day, evening, or weekend hours and may begin as early as 5:00 A.M. or end as late as 11:30 P.M. The college reserves the right to schedule clinical experiences up to 60 miles from the college as needed to ensure successful completion of program outcomes.

**Physical Activity Requirements**

This occupation requires medium physical activity, handling body fluids, and exposure to infectious diseases. Nurses are often standing for long periods of time. For safety and protection of patients, student nurses must be able to perform basic cardiac life support, including CPR, and function in stressful and/or emergency situations.

**Entry Requirements**

The following are required to enter the Practical Nursing Program:

**1. Pre-requisite Courses:** A student must achieve an average of a "B-" for all pre-requisite courses. (CPTC courses with an "&" in the course name are transferable to other Washington State educational institutions.) A minimum grade of C (2.0) is required in all transferable (&) General Education coursework.

- CHEM& 121 (5 Cr.)
- BIOL& 160 (5 Cr.)
- BIOL& 241 Human A & P 1 w/Lab (5 Cr.)
- BIOL& 242 Human A & P 2 w/Lab (5 Cr.)
- ENGL& 101 English Composition I (5 Cr.)
- MATH& 146 Introduction to Stats (5 Cr.)
- PSYC& 100DIV General Psychology (5 Cr.)

Must achieve a passing grade in COLL 102

- COLL 102 College Success for All (3 Cr.)

**2. American Heart Association CPR for the Health Care Provider.** This includes adult, child, and infant, under the guidelines of the American Heart Association. Online CPR courses are not accepted. Students are required to carry personal health/medical insurance throughout their clinical rotations.

**3. Proof of immunizations.** Please refer to the Nursing Program Website for a list of current required immunizations.

**4. Additionally, once a student is accepted into the program, the following is expected:**

- Student must receive a "No Record On File" report related to crimes against persons from the Washington State Patrol. A non-refundable fee is charged to each student for the background check.
- Student will upload all clinical documentation, including immunizations into current document management system.
- Student will keep department up-to-date on any changes related to background checks, address or name changes.

**Admission Dates**

Students will be admitted in Fall and Spring.

If students are taking or have taken prerequisite courses at

another educational institution, they must have credits evaluated prior to submitting the application. Students must request an official college transcript be sent to CPTC Enrollment Services for evaluation and complete a transfer credit request form. Mail your official transcript to Clover Park Technical College ATTN: Credential Evaluator.

To apply, please refer to the Nursing Program Website for application timelines and specific details.

**Program Accreditation**

**The Clover Park Technical College Practical Nursing Program is accredited by the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) located at 2600 Virginia Avenue, NW, Washington DC 20032, 202-909-2526**

**Completion Requirements**

Program Course List

NURS 170	Introduction to Health and Wellness	5
NURS 171	Introduction to Health and Wellness Lab	1
NURS 172	Introduction to Health and Wellness Clinical/SIM	5
NURS 173	Communication in Healthcare I	2
NURS 180	Variations of Health and Wellness I	5
NURS 181	Variations in Health and Wellness I Lab	2
NURS 182	Variations in Health and Wellness I Clinical/Simulation	5
NURS 186	Psychosocial Issues in Nursing I	3
NURS 190	Variations in Health and Wellness II	5
NURS 191	Variations in Health and Wellness Lab II	1
NURS 192	Variations in Health and Wellness CLIN/SIM II	6
NURS 194	Ethics and Policy in Nursing I	2

**Subtotal: 42**

**Operations Management**

**Bachelor of Applied Science in Operations Management**

BACHELOR OF APPLIED SCIENCE DEGREE

CPTC's Bachelor of Applied Science in Operations Management (BAS-OPM) degree has been designed to meet the needs of students who want to move into supervisory and management roles in industry.

In the BAS-OPM program, students will learn about operations management tools and techniques, develop core business skills, and apply them to solve problems in industry. Focused-study courses and individual and group capstones help develop the critical thinking skills required for a successful career in an operations management role.

This degree has been designed to meet the educational needs of working adults. It is based on a combination of web-based instruction with study groups meeting at times convenient to students.

### Program Length

The program is approximately six-to-eight quarters in length, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Fall quarter or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

### Admission to the Program

**Admission to the program may occur when the following can be documented:**

- Successful completion (or proof of enrollment in the last quarter thereof) of either:
  - Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree or equivalent from a regionally accredited institution with an overall minimum 2.3 GPA. **OR**
  - An appropriate body of preparation as determined by the college, including completion of 90 college-level credits, employment, or other life experience that qualifies for credit for prior learning and meets the upper-division course prerequisites.
- A minimum grade of 2.0 is required in all general education coursework.
- 5 college-level credits in English Composition

(ENGL& 101 or higher).

- 5 college-level credits in a transferable social science course.

### Admission to the Junior Year

Once admitted to the program, the following must be documented before students can move on to the junior year of the program:

- 5 credits of MATH& 146 or another higher-level statistics class
- 5 credits in a humanities subject – CMST&220 recommended
- 10 credits in natural sciences with at least one science course with a lab component. Recommended courses: CHEM& 110 (with lab), CHEM& 121 (with lab), PHYS& 114 (with lab), and another transferable science or transferable math course other than MATH& 146.
- 5 credits in any college-level lower division General Education courses: English Composition, Social Science, Humanities, or Natural Science

These requirements can be satisfied by coursework completed before admission to the BAS-OPM program, or during a "bridge" quarter included within the BAS-OPM program. The bridge quarter can include up to 25 credits as required. Bridge courses may be taken concurrently with upper-level BAS classes.

### Graduation Requirements

To successfully complete the degree, students must maintain a minimum grade of 2.0 in all coursework, including "bridge" quarter courses, program courses, and general education courses.

### Second Baccalaureate Degree General Education Requirements

Applicants who have already earned a baccalaureate degree from an accredited college or university may be able to substitute previous courses for our general education requirements based on the Washington State Second Baccalaureate Degree policy outlined in the Policies and Procedures.

Students must still complete program-specific general education degree requirements if not otherwise

satisfied. The program-specific general education requirements in the BAS-OPM degree are listed below:

- Statistics
- Mathematical Techniques for Operations Management
- Measurement and Statistical Process Control
- Project Management
- Professional Ethics or equivalent
- Managerial Economics or equivalent

**Program Course List**

MAT 311	Mathematical Techniques for Operations Management	5
MAT 413	Measurement and Statistical Process Control	5
OPM 312	Forecasting and System Design	5
OPM 313	Quality Management	5
OPM 314	Logistical Planning & Supply Chain Management	5
OPM 315	Lean Concepts and Applications	5
OPM 411	Facility Layout and Materials Handling	5
OPM 412	Workplace Health and Safety Management	5
OPM 491	Focused Study I	5
OPM 492	Focused Study II	5
OPM 493	Focused Study III	5
OPM 498CAP	Individual Capstone Project Or	5
OPM 495	Internship	5
OPM 499CAP	Group Capstone Project	5
BUS 310	Project Management	5
ECON 310	Managerial Economics	5
ENG 310	Business Communications	5
PHIL 310DIV	Professional Ethics	5
PSYC 311DIV	Industrial & Organizational Psychology	5

**Subtotal: 90**

*OPM 498CAP: With instructor’s permission, OPM 495 – Internship – can be substituted for OPM 498.*

*Note: Total credits for the degree do not include the bridge quarter (if needed).*

## Pastry Arts

### Pastry Arts - Associate of Applied Technology Degree

The Pastry Arts degree program at Clover Park Technical College is a six-quarter degree program designed for students seeking entry into, or career advancement in, the pastry arts job market, specifically as a pastry arts chef.

This program prepares student for careers as bakers, pastry chefs and other pastry arts positions. Students already working in the culinary arts field can select a study path that will expand their skills and further their employment potential. The Pastry Arts degree is designed to provide hands-on training that will prepare students for careers in pastry arts.

Students pursuing an AAT degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment, or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

This program is a combination of on-line, classroom, laboratory and practical experience in our on-campus bistro. It is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
BAKE 106	Chocolate I (Confections)	4
BAKE 109	Patisserie I	5
BAKE 114	Dessert Alternatives (Sugar Free, Gluten Free)	3
BAKE 116	Patisserie II	5
BAKE 117	Frozen Desserts	3
BAKE 118	Cakes	4
BAKE 119	Yeast Breads	4
BAKE 122	Patisserie III	5
BAKE 131	Pies, Tarts, Custards and Fillings	4
BAKE 134	Quick Breads, Cookies, Brownies	3
BAKE 140	Restaurant (Individual) Desserts and Petit Fours	5
BAKE 153	Sugar Work	3
BAKE 157	Wedding Cakes	3
BAKE 163	Retail and Customer Service	5
BAKE 165	Kitchen and Bistro Management	3
RBM 107	Marketing	3
REST 103	Food & Beverage Cost Control	4
REST 119	Operations Management	4
REST 133	Beverage Service Management	4
COLL 102	College Success for All	3
	100-level math class	5
CMST& 220	Public Speaking	5
	Or	
ENGL& 101	English Composition I	5
	Computer Literacy Requirement	3
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
REST 124	Restaurant Bookkeeping	4
	<b>Subtotal: 102</b>	

**AAT Degree Requirements**

Computer Literacy Requirement: CAS 130 (Excel I) recommended to meet computer literacy degree requirement or successful completion of computer literacy exam

**Pastry Arts Basic Certificate**

This program prepares students with the basic skills and knowledge required for entry-level positions in the baking and pastry industry. Students gain hands-on experience and theoretical training as they produce quality bakery products from scratch.

**Physical Activity Requirements**

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

**Employability Requirements**

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

**Program Length**

The program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

None.

**Program Course List**

CUL 104	Sanitation in Food Service Operations	3
BAKE 109	Patisserie I	5

BAKE 114	Dessert Alternatives (Sugar Free, Gluten Free)	3
BAKE 116	Patisserie II	5
BAKE 117	Frozen Desserts	3
BAKE 118	Cakes	4
BAKE 119	Yeast Breads	4
BAKE 122	Patisserie III	5
BAKE 131	Pies, Tarts, Custards and Fillings	4
BAKE 134	Quick Breads, Cookies, Brownies	3
COLL 102	College Success for All	3
<b>Subtotal: 42</b>		

<b>Program Course List</b>		
BAKE 106	Chocolate I (Confections)	4
BAKE 140	Restaurant (Individual) Desserts and Petit Fours	5
BAKE 153	Sugar Work	3
BAKE 157	Wedding Cakes	3
BAKE 163	Retail and Customer Service	5
BAKE 165	Kitchen and Bistro Management	3
RBM 107	Marketing	3
REST 103	Food & Beverage Cost Control	4
REST 119	Operations Management	4
REST 124	Restaurant Bookkeeping	4
REST 133	Beverage Service Management	4
<b>Subtotal: 42</b>		

## Pastry Arts Advanced Certificate

This program prepares students with the advanced skills and knowledge required for entry-level positions in the baking and pastry industry. Students gain hands-on experience and theoretical training as they produce quality bakery products from scratch.

### Physical Activity Requirements

This occupation requires the ability to stand, walk, and perform repetitive motions for extended periods of time and lift up to 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements and obtain employment in this field.

### Employability Requirements

All food workers (includes those who work with unpackaged food, food equipment or utensils, or with any surface where people put unwrapped food) are required to have a valid food worker card to work in Washington. (Chapter 246-217 WAC.)

### Program Length

The program is approximately three quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

### Prerequisite(s)

Successful completion of Pastry Arts Basic Certificate

## Pharmacy Technician Advanced

### Pharmacy Technician Advanced - ASHP/ACPE Accredited Associate of Applied Technology Degree

Pharmacy technicians process prescriptions, prepare intravenous drugs, order and stock medications, prepare billing, and operate and troubleshoot automated drug-dispensing systems.

Successful graduates of this program are educated and trained in pharmacy technician duties and responsibilities under the dual guidelines of the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education.

The structured classroom curriculum includes customer service, communication, prescription processing, aseptic technique, human relations, and pharmacy calculations. The clinical component of the program gives students the chance to practice the skills they learn in the classroom and laboratory environment. This prepares students to assume the role of a pharmacy technician in community, hospital, long term care, compounding and other types of pharmacies.

Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

This program is a combination of online, classroom, laboratory, and clinical experience. During the clinical experience quarter, students are required to attend 40 hours

per week of clinical experience, Monday through Friday. Actual times may vary by pharmacy; most will be day shift hours.

The Pharmacy Technician daytime program is supported with I-BEST classes. The I-BEST classroom offers a team-teaching approach, providing students with twice the support at no extra cost. With I-BEST, you will work with two teachers in the classroom. One teacher will provide job training (pharmacy technician). The other will teach basic skills in reading, writing, math, English language and employability. You'll learn several topics at once, earn college credits and move faster toward your career or education goals.

### Employability Requirements

Washington State Pharmacy Quality Assurance Commission (PQAC) requires:

- Completion of an approved pharmacy technician program.
- Proof of passing a national pharmacy technician certification examination (PTCE).
- Students must have a high school diploma (i.e., GED) prior to applying for the Washington state license.
- A comprehensive background check will be conducted to screen for prior convictions.
- Drug use, criminal background checks, and immunization status may prevent completion of the program and/or future employment as a pharmacy technician.

### Physical Requirements

Students of the Pharmacy Technician program are required to discriminate increment readings on syringes and discriminate different colored and shaped objects. Students need to be able to recognize and respond to voices under protective garb and over the phone. Excellent fine motor skills are required. Must be able to type 35 WPM by the end of our first quarter. During compounding students will need to stand for long periods wearing personal protective equipment (PPE) with arms out in front of them. Students are expected to be able to lift 25 lbs. and push pull carts up to 50 lbs.

### Program Length

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Spring and Fall starts are daytime programs.

Winter start is an evening program.

### Completion Requirements

#### Prerequisite(s)

To enter the program, students must meet the prerequisites for college-level reading, writing, and math. Students must maintain a "C" or above in all technical and general education courses to continue in the program.

Students will have a comprehensive background check performed by the PQAC as well as Castle Branch prior to their clinical rotation. A non-refundable fee is charged to each student for the background check. . Students must have current immunizations or laboratory verification of immune status. This could include, but is not limited to, Measles/Mumps/Rubella, Hepatitis B series and titer, Tetanus/ Diphtheria, Tuberculosis Test, COVID, Current Flu and Varicella, as required by contracts with clinical facilities and CDC recommendations. It is recommended to get started on your Hepatitis B series as soon as possible. This series can take 6 to 7 months to complete.

Students must have current American Heart Association CPR for the Healthcare Professional certification. Due dates for your CPR and immunizations will be discussed the first day of class.

Students can not start their clinical experience prior to turning 18, due to state licensing laws they cannot practice or become licensed until they turn 18.

### Program Course List

PT 120	Pharmacology Part I	5
PT 121	Introduction to Pharmacy & Pharmacy Law	5
PT 122	Generic Drug Names Part I	2
PT 133	Pharmaceutical Calculations	3
PT 134	Pharmacy Lab	4
PT 136	Pharmacology Part II	5
PT 137	Community Practice with Lab	3
PT 138	Generic Drug Names Part II	2
PT 139	Hospital Practice	5
PT 146	Medication Research	3
PT 158	Clinical Capstone Research	4
PT 163CAP	Community Pharmacy Clinical Capstone	7
PT 164	Advanced Pharmacy Practice	6
PT 165CAP	Institutional Clinical Capstone	7
PT 167	Advanced Lab	4

PT 169	Hospital Lab	4
COLL 102	College Success for All	3
CAH 105CL	Computer Applications	5
CMST& 220	Public Speaking	5
	Or	
ENGL& 101	English Composition I	5
MAT 108	Math for Health Occupations	5
	Or	
	100-level math class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5

**Subtotal: 92**

NOTE: PSYC 100DIV or higher, but not PSY 112

## Pharmacy Technician - ASHP/ACPE Accredited Certificate

Pharmacy Technicians process prescriptions, prepare intravenous drugs, order and stock medications, prepare billing, and operate and troubleshoot automated drug-dispensing systems.

Successful graduates of this program are educated and trained in pharmacy technician duties and responsibilities under the dual guidelines of the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education.

The structured classroom curriculum includes customer service, communication, prescription processing, aseptic technique, human relations, and pharmacy calculations. The clinical component of the program gives students the chance to practice the skills they learn in the classroom and laboratory environment. This prepares students to assume the role of a pharmacy technician in community, hospital, long term care, compounding and other types of pharmacies.

This program is a combination of online, classroom, laboratory, and clinical experience. During the clinical experience quarter, students are required to attend 40 hours per week of clinical experience, Monday through Friday. Actual times may vary by pharmacy; most will be day shift hours.

The Pharmacy Technician daytime program is supported with I-BEST classes. The I-BEST classroom offers a team-teaching approach, providing students with twice the support at no extra cost. With I-BEST, you will work with two teachers in the classroom. One teacher will provide job training (pharmacy technician). The other will teach basic skills in reading, writing, math, English language and employability. You'll learn several topics at once, earn college credits and move faster toward your career or education goals.

### Employability Requirements

Washington State Pharmacy Quality Assurance Commission (PQAC) requires:

- Completion of an approved pharmacy technician program.
- Proof of passing a national pharmacy technician certification examination (PTCE).
- Students must have a high school diploma (i.e., GED) prior to applying for the Washington state license.
- A comprehensive background check to screen for prior convictions.
- Drug use, criminal background checks, and immunization status may prevent completion of the program and/or future employment as a pharmacy technician.

### Physical Requirements

Students of the pharmacy technician program are required to discriminate increment readings on syringes and discriminate different colored and shaped objects. Students need to be able to recognize and respond to voices under protective garb and on the phone. Excellent fine motor skills are required. Must be able to type 35 WPM by the end of the first quarter. During compounding students will need to stand for long periods wearing Personal Protective Equipment (PPE) with arms out in front of the body. Students are expected to be able to lift 25 lbs. and push and pull carts up to 50 lbs.

### Program Length

This program is approximately three (3) quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates



Spring and Fall starts are daytime programs.

Winter start is an evening program.

### Completion Requirements

#### Prerequisite(s)

To enter the program, students must meet the prerequisite for college-level reading, writing, and math. Students must maintain a “C” or above in all technical and general education courses to continue in the program.

Students will have a comprehensive background check performed prior to their clinical rotation. A non-refundable fee is charged to each student for the background check.

Students must have current immunizations or laboratory verification of immune status. This could include, but is not limited to, Current Flu and COVID. as required by contracts with clinical facilities and CDC recommendations.

Students must have current American Heart Association CPR for the Healthcare Professional certification. Due dates for your CPR and immunizations will be discussed the first day of class.

Students can not start their clinical experience prior to turning 18, due to state licensing laws they cannot practice or become licensed until they turn 18.

#### Program Course List

COLL 102	College Success for All	3
PT 120	Pharmacology Part I	5
PT 121	Introduction to Pharmacy & Pharmacy Law	5
PT 122	Generic Drug Names Part I	2
PT 133	Pharmaceutical Calculations	3
PT 137	Community Practice with Lab	3
PT 134	Pharmacy Lab	4
PT 136	Pharmacology Part II	5
PT 138	Generic Drug Names Part II	2
PT 139	Hospital Practice	5
PT 163CAP	Community Pharmacy Clinical Capstone	7

**Subtotal: 44**

## Pre-Nursing

### Pre-Nursing - Associate in Pre-Nursing Direct Transfer Agreement/Major Related Program (DTA/MRP)

Designed for the student who plans to transfer to a Bachelor of Science in Nursing (BSN) program at a four-year university, the Associate in Pre-Nursing offers a broad spectrum of academic courses that prepare students for upper-division coursework leading to the Bachelor of Science, Nursing degree (entry-to-practice/basic BSN). Pre-nursing graduates are prepared to apply to BSN programs at various institutions across Washington state, including the following baccalaureate institutions that are participants in this agreement with the community and technical college system: University of Washington, Seattle; Washington State University; Northwest University; Seattle University; Seattle Pacific University; Pacific Lutheran University; Walla Walla University; and the Washington State University Intercollegiate College of Nursing (WSU-ICN), a consortium whose members include Eastern Washington University, Gonzaga, and Whitworth. Associate degree transfers to WSU-ICN are admitted through WSU, not through the other consortium institutions.

Meeting the minimum requirements for this DTA/MRP does not guarantee admission a BSN program. Admission deadlines for transfer institutions vary, and students are required to meet the transfer admission deadline. Nursing-related programs are competitive and may require a higher GPA than a 2.0 overall. Minimum GPA requirements may vary among nursing programs.

It is recommended that students pursuing the Pre-Nursing degree contact their potential transfer institutions early in their program regarding specific course choices in each area where electives are listed.

To receive the DTA degree, students must have earned a minimum of a cumulative college-level GPA of at least a 2.0 and have completed at least 90 quarter hours of transferable credit, including a minimum of 60 quarter hours of general education courses as shown below.

CPTC does not offer every course each quarter. It is the student's responsibility to discuss sequencing and work out their individual schedule with a program counselor, located in the Advising and Counseling Office. Any developmental coursework a student may be required to complete may increase the program length.

**Program Length**

This program is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Advising Notes**

1. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive and therefore students should be informed that the Pre-Nursing DDTA/MRP is highly transferable to all Washington public and many Washington private baccalaureate institutions.
2. Students should check with their potential transfer institutions for admission requirements, some admission requirements may not be met by this DTA/MRP. Some transfer institutions may require additional courses before starting the BSN.
3. Some transfer institutions may require additional courses before starting the BSN.
4. Students must apply to graduate at the community or technical college to be awarded this DTA/MRP.
5. Many BSN programs recommend a public speaking course. Students should contact their transfer institution(s) to find out if a public speaking course is preferred.
6. Students are encouraged to consult with the transfer institution(s) regarding the Humanities courses that best prepare them for a BSN and for admission to the institution(s).
7. Students are encouraged to take courses that provide them with an understanding of and sensitivity to human diversity.
8. Introductory survey courses or review courses do not meet the content level expectations for the Natural Sciences distribution area. Six-credit courses may be used in place of five-credit courses in the Natural Sciences distribution area. Extra credits may apply toward the Electives distribution area.
9. In order to better prepare for successful transfer, students are encouraged to consult with the institution(s) to which they wish to transfer regarding the humanities courses and other electives that best

support or may be required as prerequisites to their nursing curriculum.

**Completion Requirements**

**Prerequisite(s)**

Students are required to be proficient in intermediate algebra, which is a prerequisite to the math courses included in this program. Individual courses may have prerequisites.

**Program Course List**

<b>Communication (10 Cr.)</b>		
ENGL& 101	English Composition I	5
ENGL& 102	Composition II	5
ENGL& 235	Technical Writing	5

Walla Walla University requirement: The second English Composition course must be a research writing course. ENGL& 102, or equivalent, fulfills this requirement.

<b>Quantitative and Symbolic Reasoning (5 Cr.)</b>		
MATH& 146	Introduction to Statistics	5

UW Seattle requirement: Requires 5 additional credits in college algebra, pre-calculus, or logic.

Seattle University requirement: Requires 5 additional credits in college algebra or pre-calculus.

**Humanities (15 Cr.)**

Five (5) credits in Public Speaking, Interpersonal Communication, or Intercultural Communication

Ten (10) credits in other Humanities courses		
CMST& 220	Public Speaking	5
	Humanities Elective	5
	Humanities Elective	5

<b>Humanities Electives Available Through CPTC</b>		
ART& 100	Art Appreciation	5

ASL& 121	American Sign Language I	5
	Or	

ASL& 122	American Sign Language II	5
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HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5

Note: Only one 100-level language course may be used to meet the humanities requirement.

Washington State University requirement: Requires

curriculum that provides students with an understanding of and sensitivity to human diversity. The Humanities distribution area provides an opportunity to meet this requirement. For potential choices go to and select UCORE category “DIVR”:

<https://ucore.wsu.edu/students/categoriesand-courses/#DIVR>

**Social Sciences (15 Cr.)**

PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
SOC& 101DIV	Introduction to Sociology	5

Washington State University requirement: Requires curriculum that provides students with an understanding of and sensitivity to human diversity. The Social Sciences distribution area provides an opportunity to meet this requirement. For potential choices go to and select UCORE category “DIVR”:

<https://ucore.wsu.edu/students/categoriesand-courses/#DIVR>

Walla Walla University requirement: Requires a course in General Sociology.

**Natural Sciences (35 Cr.)**

BIOL& 160	General Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
NUTR& 101	Nutrition	5

At the time of application when some of the course work may not yet be completed, University of Washington requirement: Requires a minimum cumulative GPA of 3.0 for three Natural Sciences courses or a minimum cumulative GPA of 2.8 for four Natural Sciences courses.

**Electives (10 Cr.)**

A specific elective course may be credited toward no more than one distribution or skill area requirement. A maximum of 5 elective credits may be in college-level courses as defined by CPTC, and the remainder shall be fully transferable as defined by the receiving institution. Select courses appropriate for intended major and intended bachelor’s institution. Students should contact an advisor at the potential transfer institution regarding their interests and specific course choices.

Elective	5
Elective	5
College Success Course (3 Cr.)	
COLL 102	College Success for All
	3
Computer Literacy Course (3 Cr.)	
	Computer Literacy
	3
<b>Subtotal: 96</b>	

University of Washington requirement: Requires 100 hours of healthcare experience.

## Professional Pilot

### Professional Pilot - Associate of Applied Technology Degree / Associate in Applied Science – T Degree

A professional pilot possesses a commercial pilot certificate issued by the Federal Aviation Administration (FAA).

Students graduating from this program usually begin their careers as flight instructors. After working as a flight instructor for one or two years, most progress into charter flight, corporate flying, and commuter or major commercial airlines.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

#### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

#### Program Length

This certificate program is approximately eight quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer, fall, winter, and spring quarters

**\*Professional Pilot Aircraft Rental Rates**

Rates				
Plane	Rate	*Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
Non-Complex Aircraft	\$96.88	\$5.68	9 GPH	\$148
Complex Aircraft	\$157.66	\$5.68	14 GPH	\$237.18
Twin Aircraft	\$294.57	\$5.68	9.5 GPH	\$348.53

\*Aircraft costs are aligned with current fuel market prices.

**Professional Pilot Flight Fees**

**\*Private Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	60 minimum hours	\$148	\$8880
Pre and Post Briefings	60 hours	\$15	\$900
Dual Instruction	47 hours	\$55	\$2,585
Total Flight Fee Costs		\$12,365	

\*Aircraft costs are aligned with current fuel market prices.

**\*Instrument Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	60 minimum hours	\$148	\$8880
Pre and Post Briefings	60 hours	\$15	\$900
Dual Instruction	60 hours	\$55	\$3,300
Total Flight Fee Costs		\$13,080	

\*Aircraft costs are aligned with current fuel market prices.

**\*Commercial Pilot Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	105 minimum flight hours	\$148	\$15,540
	15 minimum flight hours	\$237.18	\$3,557.70
Pre and Post Briefings	120 hours	\$15	\$1,800
Dual Instruction	55 hours	\$55	\$3,025
Total Flight Fee Costs		\$23,922.70	

\*Aircraft costs are aligned with current fuel market prices.

**Other Exams**

FAA Knowledge Test – 3 @ \$175.00 each Check for current cost with instructor.	\$525.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 3 @ Examiner Fee (Approximately \$800.00 each)	\$2,400.00
FAA Check Ride – 3 @ Aircraft Rental Fee (Approximately \$222.00 each)	\$666.00

**Program Outcomes**

- Model aeronautical decision-making principles to identify and mitigate risk factors.
- Apply emergency operation procedures in a simulated situation.
- Integrate pilotage, dead reckoning, and radio navigation techniques with aircraft instruments and aeronautical charts during cross country flights.
- Consider crew resource management principles during scenario-based training.
- Apply applicable Federal Aviation Administration regulations to flight operations.
- Apply visual flight rules to flights under visual meteorological conditions.
- Apply instrument flight rules to flights under instrument meteorological conditions.
- Perform the tasks required to pass the Federal Aviation Administration practical tests for private, instrument, and commercial certificate per the FAA Airman Certification standards.

**Completion Requirements**

**Prerequisite(s)**

- A mandatory Information Session is required prior to admission to the program. See the college web site for information session dates.
- Must be at least 16 1/2 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.

**Program Course List**

AVP 105	Private Pilot I	4
AVP 110	Private Pilot II	4
AVP 115	Private Pilot III	4
AVP 125	Private Pilot IV	4
AVP 130	Private Pilot V	4
AVP 135CAP	Private Pilot VI	4
AVP 140	Instrument Pilot I	4
AVP 145	Instrument Pilot II	4
AVP 150	Instrument Pilot III	4
AVP 155	Instrument Pilot IV	4
AVP 160	Instrument Pilot V	4

AVP 170CAP	Instrument Pilot VI	4
AVP 175	Commercial Pilot I	4
AVP 180	Commercial Pilot II	4
AVP 185	Commercial Pilot III	4
AVP 210	Commercial Pilot IV	4
AVP 215	Commercial Pilot V	4
AVP 220	Commercial Pilot VI	4
AVP 230	Commercial Pilot VII	4
AVP 235	Commercial Pilot VIII	4
AVP 240	Commercial Pilot IX	4
AVP 245	Commercial Pilot X	4
AVP 250	Commercial Pilot XI	4
AVP 255CAP	Commercial Pilot XII	4

**Subtotal: 96**

**AAT Degree Requirements**

Technical Course Requirements	96
AAT General Education Requirements	18
Computer Literacy Requirement	3

**Subtotal: 117**

AAT Degree General Education Requirements: See list below

Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam

**AAS-T Degree Requirements**

Technical Course Requirements	96
AAS-T Degree General Education Requirements	23
Computer Literacy Requirement	3

**Subtotal: 122**

AAS-T Degree General Education Requirements: See list below

Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam

*Note: Students complete the Professional Pilot Program requirements at different rates due to their own skills and abilities, availability of planes and weather conditions that can alter scheduled flying times. Thus, the number of quarters needed to satisfactorily complete all graduation requirements may exceed those listed above. Students must meet FAA flight time requirements prior to graduation.*

<b>Optional Training</b>		
AVP 190	Airline Multi-Engine CRM (Crew Resource Management) I	3
AVP 195	Airline Multi-Engine CRM (Crew Resource Management) II	3
AVP 218	Multi-Engine Instructor Certification MEI	3
AVP 260	Certified Flight Instructor I	4
AVP 265	Certified Flight Instructor II	4
AVP 268	Certified Instrument Flight Instructor	4
AVP 271	Multi-Engine Certification	3
<b>Optional Elective Courses</b>		
AVP 118	Private Pilot Practical Test Standards I	4
AVP 138	Private Pilot Practical Test Standards II	4
AVP 152	Instrument Pilot Practical Standards III	4
AVP 172	Instrument Pilot Practical Standards IV	4
AVP 223	Commercial Pilot Practical Standards V	4
AVP 257	Commercial Pilot Practical Standards VI	4

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below.

**AAT Degree General Education Requirements (18 credits)**

ENGL& 101	English Composition I Or	5
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
COLL 102	College Success for All	3

*NOTE: CMST& 220 or higher*

*PSYC& 100DIV: PSY 112DIV, SOC& 101DIV, or other humanities course that meets the diversity requirement*

**AAS-T Degree General Education Requirements (23 credits)**

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

<b>5 credits in communication:</b>		
ENGL& 101	English Composition I	5
<b>5 credits in quantitative reasoning:</b>		
MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5
<b>5 credits in a social science that meets the diversity requirement:</b>		
PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5
<b>5 credits in social science, humanities, or science;</b>		
choose one from the following:		
ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	United States Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5

PSYC& 220	Psychological Disorders	5
SOC& 101DIV	Introduction to Sociology	5
3 credits in College Success:		
COLL 102	College Success for All	3

## Private Pilot Certificate

Private pilots are able to fly with passengers aboard an aircraft and have no limitations on where they can fly.

This is the first FAA certificate students obtain if they eventually want to upgrade to higher certificates and ratings. Content includes basic maneuvering flight, takeoffs, landings, and cross-country flying. Ground training includes in-depth training on meteorology, aerodynamics, national airspace structure and navigation, and aircraft systems.

### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

Rates

\*Professional Pilot Aircraft Rental Rates

Plane	Rate	Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
<b>Non-Complex Aircraft</b>	\$96.88	\$5.68	9 GPH	\$148
<b>Complex Aircraft</b>	\$157.66	\$5.68	14 GPH	\$237.18

\*Aircraft costs are aligned with current fuel market prices.

\*Private Pilot Certificate

	Flight Hours	Hourly Rate with Fuel	Total
<b>Aircraft Rental</b>	60 minimum hours	\$148	\$8880
<b>Pre and Post Briefings</b>	60 hours	\$15	\$900
<b>Dual Instruction</b>	47 hours	\$55	\$2,585
<b>Total Flight Fee Costs</b>		\$12,365	

\*Aircraft costs are aligned with current fuel market prices.

### Other Exams

FAA Knowledge Test – 1 @ \$175.00 each Check for current cost with instructor.	\$175.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 1 @ Examiner Fee (Approximately \$800.00 each)	\$800.00
FAA Check Ride – 1 @ Aircraft Rental Fee (Approximately \$222.00 each)	\$222.00

## Completion Requirements

### Prerequisite(s)

- Must be at least 16 1/2 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.
- Please note that many students need additional training hours to master the required competencies.
- 60 hours of total flight time: 47 hours of dual and 13 hours of solo. Ground instruction—60 hours. Pre- and post-flight briefings—60 hours.
- Industry average flight time for Private Pilot certification is 60-75 hours.

Program Course List

AVP 105	Private Pilot I	4
AVP 110	Private Pilot II	4
AVP 115	Private Pilot III	4
AVP 125	Private Pilot IV	4
AVP 130	Private Pilot V	4
AVP 135CAP	Private Pilot VI	4
COLL 102	College Success for All	3
<b>Subtotal: 27</b>		

Optional Elective Courses

AVP 118	Private Pilot Practical Test Standards I	4
AVP 138	Private Pilot Practical Test Standards II	4

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

**Flight Training Hours**

				1st Quarter		
				<b>AVP 105</b>		
				Hood	DUAL	SOLO
				FLT 1	2	
				FLT 2	2	
				FLT 3	0.2	2
				FLT 4	0.2	2
				FLT 5	0.2	2
					0.6	10
				<b>AVP 110</b>		
				Hood	DUAL	SOLO
				FLT 6	2	
				FLT 7	0.2	2
				FLT 8	0.2	2.5
FLT 1-9				FLT 9	2	0.5
<b>STAGE CHECK</b>				<b>FLT 10</b>		
					1.5	
					0.4	10 0.5
				<b>AVP 115</b>		
				Hood	DUAL	SOLO
				FLT 11	1.5	
				FLT 12		1
				FLT 13		1
				FLT 14	0.5	1.5
				FLT 15	0.5	1.5
				FLT 16N	1	
				FLT 17C	2	
				1	7.5	2



		2nd Quarter		
		<b>AVP 125</b>		
		Hood	DUAL	SOLO
	FLT 17c	0.5	2	
	FLT 18nc	0.5	2	
FLT 11-19c	FLT 19c			2.5
<b>STAGE CHECK</b>	<b>FLT 20</b>		<b>1.5</b>	
	FLT 21c			2
		1	5.5	4.5
		<b>AVP 130</b>		
		Hood	DUAL	SOLO
	FLT 22c*			4
	FLT 23	0.2	4	
	FLT 23B			2
		0.2	4	6
		<b>AVP 135</b>		
		Hood	DUAL	SOLO
FLT 21c-24A	FLT 24A	0.2/as req	4	
<b>STAGE CHECK</b>	<b>FLT 25</b>	<b>0.2</b>	<b>1.5</b>	
	FLT 24B	0.2/as req	3	
<b>EOC</b>	<b>FLT 26</b>	<b>0.2</b>	<b>1.5</b>	
		0.8	10	

Night Flight only dual

**Bold = Stage check**

\*Long XC Check syllabus for requirements

4 hours of Hood time required

c = cross country (XC)

Check syllabus for each flights requirement

**INCOMPLETE POLICY**

For each AVP class taken there must be a minimum number of lessons completed in order for an incomplete to be issued. Attached is a document that has all flight lessons for each AVP class. Each lesson with a black box next to it must be completed if the student wants an incomplete for that AVP class. All lessons in all previous AVP classes must also be completed for an incomplete to be issued. If a student fails to complete those flights, a failing grade will be issued for that AVP class. For an incomplete to be issued for AVP 135, AVP 170 and AVP 255 all Jeppesen knowledge testing and FAA knowledge test must have been completed with a passing grade. All students with an incomplete issued are required to be in ground school class for the corresponding incomplete issued.

**Commercial Pilot Certificate**

The Commercial Pilot Certificate allows the holder to fly for hire in a variety of pilot positions. Content of the course includes advanced aircraft performance maneuvers and cross-country flight. Students receive advanced training in aircraft systems, meteorology, and aircraft performance.

Included in this program are academic courses in communication (English composition, speech), quantitative reasoning (math), and social sciences (psychology, sociology) that enhance personal development and provide knowledge and abilities upon which technical skills are built.

**\*Professional Pilot Aircraft Rental Rates**

**Rates**

Plane	Rate	Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
<b>Non-Complex Aircraft</b>	\$96.88	\$5.68	9 GPH	\$148
<b>Complex Aircraft</b>	\$157.66	\$5.68	14 GPH	\$237.18

\*Aircraft costs are aligned with current fuel market prices.

### Professional Pilot Flight Fees

#### \*Commercial Pilot Certificate

	Flight Hours	Hourly Rate with Fuel	Total
<b>Aircraft Rental</b>	105 minimum flight hours	\$148	\$15,540
	15 minimum flight hours	\$237.18	\$3,557.70
<b>Pre and Post Briefings</b>	120 hours	\$15	\$1,800
<b>Dual Instruction</b>	55 hours	\$55	\$3,025
Total Flight Fee Costs		\$24,190.24	

\*Aircraft costs are aligned with current fuel market prices.

#### Other Exams

FAA Knowledge Test – 1 @ \$175.00 each Check for current cost with instructor.	\$175.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 1 @ Examiner Fee (Approximately \$800.00 each)	\$800.00
FAA Check Ride – 1 @ Aircraft Rental Fee (Approximately \$222.00 each)	\$222.00

### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

### Program Length

This certificate program is approximately four quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

- Must be at least 17 years of age.
- Must obtain a second-class FAA medical examination and comply with FAA licensing standards.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.
- FAA minimum flight and ground hours required for certification.
- Prerequisite is a Private Pilot Certificate and Instrument Rating. Minimum course requirements consist of an additional 120 hours of flight time consisting of 65 hours of solo time and 55 hours of dual instruction. Required ground training is 60 hours and pre- and post-flight briefings—120 hours.
- Please note that many students need additional training hours to master the required competencies.

#### Program Course List

AVP 175	Commercial Pilot I	4
AVP 180	Commercial Pilot II	4
AVP 185	Commercial Pilot III	4
AVP 210	Commercial Pilot IV	4
AVP 215	Commercial Pilot V	4
AVP 220	Commercial Pilot VI	4
AVP 230	Commercial Pilot VII	4
AVP 235	Commercial Pilot VIII	4
AVP 240	Commercial Pilot IX	4
AVP 245	Commercial Pilot X	4
AVP 250	Commercial Pilot XI	4
AVP 255CAP	Commercial Pilot XII	4
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
	Or	

SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3
		<b>Subtotal: 66</b>
<b>Optional Elective Courses</b>		
AVP 223	Commercial Pilot Practical Standards V	4
AVP 257	Commercial Pilot Practical Standards VI	4

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

**Flight Training Hours**

1st Quarter

**AVP 175**

	DUAL	SOLO
FL30DC	3	
FL31DC		4
FL32NL	1	
FL33NC	4	
	8	4

**AVP 180**

	DUAL	SOLO
FL24NL		1.5
FL35NL		1.5
FL36SNC		3
FL37ADC		2.5
FL37BDC		2.5
		11

**AVP 185**

	DUAL	SOLO
FL38ADC		2.5
FL38BDC		2.5
FL39ADC		2
FL39BDC		2
		9

2nd Quarter

**AVP 210**

	DUAL	SOLO
FL40ADC		2.5
FL40BDC		2.5
FL41ADC		2
FL41BDC		2
		9

**AVP 215**

	DUAL	SOLO
FL42DC	3	
FL43DC		7
	3	7

knowledge testing and FAA knowledge test must have been completed with a passing grade. All students with an incomplete issued are required to be in ground school class for the corresponding incomplete issued.

**AVP 220**

FLT 30-44		DUAL	COMPLEX	SOLO
<b>Stage Check</b>	<b>FL44</b>	<b>2</b>		
	FL45DL			1
	FL46DL	1	1	
	FL47DL	1.5	1.5	
	FL48DL	1.5	1.5	
	FL49DL	1.5	1.5	
	FL50DL	1.5	1.5	
		9	7	1

Night Flights

**Bold = Stage check**

c = cross country (XC)

DC = Day XC, DL = day local

NC = Night XC, SL = Solo Local

\*Long XC Check syllabus for requirements

Check syllabus for each flights requirement

**INCOMPLETE POLICY**

For each AVP class taken there must be a minimum number of lessons completed in order for an incomplete to be issued. Attached is a document that has all flight lessons for each AVP class. Each lesson with a black box next to it must be completed if the student wants an incomplete for that AVP class. All lessons in all previous AVP classes must also be completed for an incomplete to be issued. If a student fails to complete those flights, a failing grade will be issued for that AVP class. For an incomplete to be issued for AVP 135, AVP 170 and AVP 255 all Jeppesen

3rd Quarter					4.5	2	5	
<b>AVP 230</b>					<b>AVP 240</b>			
	DUAL	SOLO		FLT 45-66		DUAL	COMPLEX	SOLO
FL51DL	1.5					L	X	
FL52DL	1.5			<b>Stage Check</b>	<b>FL67DL</b>	<b>1</b>	<b>1</b>	
FL53DL	1.5				FL68DL	2		
FL55DL		1			FL69DL	2		
FL56DL		1			FL70DL			2
FL57DL		1			FL71DL			2
FL58DL	1.5					5	1	4
	6	3						
<b>AVP 235</b>					<b>AVP 245</b>			
	DUAL	COMPLEX	SOLO			DUAL	SOLO	
	L	X				L		
FL59DL			1		FL72DL	2		
FL60DL			1		FL73DL		2	
FL61DL			1		FL74DL		2	
FL62DL			1		FL75DL		2	
FL63DL			1		FL76DL	2		
FL64DL	1.5					4	6	
FL65DL	1				<b>AVP 250</b>			
FL66DL	2	2				DUAL	SOLO	COMPLEX
						L		X

	FL77D	2			
	L				
	FL78D	2		2	
	L				
	FL79D		2		
	L				
	FL80D		2		
	L				
	FL81D		2		
	L				
		4	6		2
	<b>AVP</b>				
	<b>255</b>				
		DUA	SOLO		COMPLE
		L			X
FLT	FL82D	2			2
68-86	L				
	FL83D	1			1
	L				
	FL84D	2			
	L				
	FL85D	2			
	L				
<b>STAG</b>	<b>FL86</b>	<b>1.5</b>			
<b>E</b>					
<b>CHEC</b>					
<b>K</b>					
	<b>FL54D</b>	<b>1.5</b>			
	L				
<b>EOC</b>	<b>FL87</b>	<b>1.5</b>			
		11.5			3

Check syllabus for each flights requirement

**INCOMPLETE POLICY**

For each AVP class taken there must be a minimum number of lessons completed in order for an incomplete to be issued. Attached is a document that has all flight lessons for each AVP class. Each lesson with a black box next to it must be completed if the student wants an incomplete for that AVP class. All lessons in all previous AVP classes must also be completed for an incomplete to be issued. If a student fails to complete those flights, a failing grade will be issued for that AVP class. For an incomplete to be issued for AVP 135, AVP 170 and AVP 255 all Jeppesen knowledge testing and FAA knowledge test must have been completed with a passing grade. All students with an incomplete issued are required to be in ground school class for the corresponding incomplete issued.

**Instrument Pilot Certificate**

The Instrument Rating is added to either a private or commercial pilot certificate. It allows the holder to fly in clouds and weather, navigating and controlling the aircraft exclusively by reference to the aircraft flight instruments.

Content includes basic attitude instrument flying, advanced radio navigation, instrument approaches, and cross-country flight.

**\*Professional Pilot Aircraft Rental Rates**

**Rates**

Plane	Rate	Fuel Cost Per Gallon	Fuel Consumption Rate	Hourly Rate with Fuel
<b>Non-Complex Aircraft</b>	\$96.88	\$5.68	9 GPH	\$148
<b>Complex Aircraft</b>	\$157.66	\$5.68	14 GPH	\$237.18

\*Aircraft costs are aligned with current fuel market prices.

Night Flight

**Bold = Stage check**

DC = Day XC, DL = day local

NC = Night XC, SL = Solo Local

### Professional Pilot Flight Fees

#### \*Instrument Pilot Certificate

	Flight Hours	Hourly Rate with Fuel	Total
<b>Aircraft Rental</b>	60 minimum hours	\$148	\$8,880
<b>Pre and Post Briefings</b>	60 hours	\$15	\$900
<b>Dual Instruction</b>	60 hours	\$55	\$3,300
Total Flight Fee Costs		\$13,080	

\*Aircraft costs are aligned with current fuel market prices.

#### Other Exams

FAA Knowledge Test – 1 @ \$175.00 each Check for current cost with instructor.	\$175.00
FAA Medical Exam Check with FAA examiner for current cost. FAA medical and examiner fee paid to provider.	\$150.00
FAA Check Ride – 1 @ Examiner Fee (Approximately \$800.00 each)	\$800.00
FAA Check Ride – 1 @ Aircraft Rental Fee (Approximately \$222.00 each)	\$222.00

### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

- Must be at least 17 years of age.
- Must obtain a second-class FAA medical examination

and comply with FAA licensing standards.

- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.
- FAA minimum flight and ground hours required for certification.
- Instrument Pilot: 60 hours of total flight time, all of which is dual instruction. Ground training required is 60 hours. Pre- and post-flight briefings time—60 hours.
- Please note that many students need additional training hours to master the required competencies.

#### Program Course List

AVP 140	Instrument Pilot I	4
AVP 145	Instrument Pilot II	4
AVP 150	Instrument Pilot III	4
AVP 155	Instrument Pilot IV	4
AVP 160	Instrument Pilot V	4
AVP 170CAP	Instrument Pilot VI	4
COLL 102	College Success for All	3
		<b>Subtotal: 27</b>

#### Optional Elective Courses

AVP 152	Instrument Pilot Practical Standards III	4
AVP 172	Instrument Pilot Practical Standards IV	4

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

**Flight Training Hours**

1st Quarter			2nd Quarter		
<b>AVP 140</b>			<b>AVP 155</b>		
	Dual	Hood/inst		Dual	Hood/inst
FL 1	1	0.8	FL 19	2	1.6
FL 2	1	0.8	FL 20	1.5	1.2
FL 3	1	0.8	FL 21	1.5	1.2
FL 4	1	0.8	Flt 14-23	FL 22	1.5 1.2
FL 5	1	0.8	<b>STAGE CHECK</b>	<b>FL 23</b>	<b>1.5 1.2</b>
FL 6	1	0.8		FL 24c	2 1.6
FL 7	1	0.8			10 8
FL 8	1.5	1.2		<b>AVP 160</b>	
FL 9	1.5	1.2			
	10	8		Dual	Hood/inst
<b>AVP 145</b>				FL 25c	2 1.6
	Dual	Hood/inst		FL 26c*	4 3.2
FL 10	1.5	1.2		FL 27c	2 1.6
FL 11	1.5	1.2			8 6.4
Flt 1-13	FL 12	1.5 1.2		<b>AVP 170</b>	
<b>STAGE CHECK</b>	<b>FL 13</b>	<b>1.5 1.2</b>		Dual	Hood/inst
	FL 14	3 2.4	Flt 24c-28	FL 22A	4 3.2
		9 7.2	<b>STAGE CHECK</b>	<b>FL 28</b>	<b>2 1.6</b>
				FL 22B	4 3.2
<b>AVP 150</b>			<b>EOC</b>	<b>FL 29</b>	<b>2 1.6</b>
	Dual	Hood/inst			12 9.6
FL 15	2.5	2	<b>Bold = Stage check</b>		
FL 16	2.5	2	*Long XC Check syllabus for requirements		
FL 17	3	2.4	c = cross country (XC)		
FL 18	3	2.4	Check syllabus for each flights requirement		
	11	8.8	<b>INCOMPLETE POLICY</b>		

For each AVP class taken there must be a minimum number of lessons completed in order for an incomplete to be issued. Attached is a document that has all flight lessons



for each AVP class. Each lesson with a black box next to it must be completed if the student wants an incomplete for that AVP class. All lessons in all previous AVP classes must also be completed for an incomplete to be issued. If a student fails to complete those flights, a failing grade will be issued for that AVP class. For an incomplete to be issued for AVP 135, AVP 170 and AVP 255 all Jeppesen knowledge testing and FAA knowledge test must have been completed with a passing grade. All students with an incomplete issued are required to be in ground school class for the corresponding incomplete issued.

### Flight Instructor Certificate

The flight instructor certificate allows a commercial and instrument- rated pilot to train flight students in acquiring their private and commercial pilot certificates. The instrument flight instructor rating allows the holder to train students working toward their instrument rating. Flight instructors can also teach aviation ground schools.

#### AVP 260 Flight Instructor I Certificate

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	10 hours (approximate)	\$148	\$1480
Pre and Post Briefings	10 hours (approximate)	\$15	\$150
Dual Instruction	10 hours	\$55	\$550

Total Flight Fee Costs: \$2,180

\*Aircraft costs are aligned with current fuel market prices.

#### AVP 265 Flight Instructor II Certificate

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	10 hours (approximate)	\$148	\$1480
Pre and Post Briefings	10 hours (approximate)	\$15	\$150
Dual Instruction	10 hours	\$55	\$550

Total Flight Fee Costs: \$2,180

\*Aircraft costs are aligned with current fuel market prices.

#### AVP 268 Flight Instructor Instrument Certificate

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	10 hours (approximate)	\$148	\$1480
Pre and Post Briefings	10 hours (approximate)	\$15	\$150
Dual Instruction	10 hours	\$55	\$550

Total Flight Fee Costs: \$2,180

\*Aircraft costs are aligned with current fuel market prices.

### Employability Requirements

To be employed as a professional pilot, at the minimum, one must possess a commercial pilot certificate. This certificate is obtained by passing a Federal Aviation Administration written test and flight test and obtaining a Federal Aviation Administration medical certificate.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.

### Program Course List

AVP 260	Certified Flight Instructor I	4
AVP 265	Certified Flight Instructor II	4
AVP 268	Certified Instrument Flight	4

Instructor

**Subtotal: 12**

*Note: Students often complete their program requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

## Multi-Engine Training Certificate

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

### AVP 271 Multi-Engine Training Certificate

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	12 hours (approximate)	\$348.53	\$4182.36
Pre and Post Briefings	12 hours (approximate)	\$15	\$180
Dual Instruction	12 hours	\$55	\$660

Total Flight Fee Costs: \$5,022.36

\*Aircraft costs are aligned with current fuel market prices.

### Program Length

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

## Completion Requirements

### Prerequisite(s)

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.

### Program Course List

AVP 271	Multi-Engine Certification	3
		<b>Subtotal: 3</b>

*Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

## Airline Multi-Engine Crew Resource Management 1 (CRM 1) Certificate

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

AVP 190 Airline Multi-Engine Crew Resource Management 1 (CRM1) Certificate

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	12 hours (approximate)	\$348.53	\$4,182.36
Pre and Post Briefings	12 hours (approximate)	\$15	\$180
Dual Instruction	12 hours	\$55	\$660

Total Flight Fee Costs: \$5,022.36

\*Aircraft costs are aligned with current fuel market prices.

**Program Length**

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver’s license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.

**Program Course List**

AVP 190	Airline Multi-Engine CRM (Crew Resource Management)	I	3
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**Subtotal: 3**

*Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed*

*those listed above in some cases.*

**Airline Multi-Engine Crew Resource Management 2 (CRM 2) Certificate**

The multi-engine training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

**AVP 195 Airline Multi-Engine Crew Resource Management 2 (CRM2) Certificate**

	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	12 hours (approximate)	\$348.53	\$4,182.36
Pre and Post Briefings	12 hours (approximate)	\$15	\$180
Dual Instruction	12 hours	\$55	\$660

Total Flight Fee Costs: \$5,022.36

\*Aircraft costs are aligned with current fuel market prices.

**Program Length**

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and

possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.

- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.

**Program Course List**

AVP 195	Airline Multi-Engine CRM (Crew Resource Management) II	3
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**Subtotal: 3**

*Note: Students often complete their program or course requirements at different rates due to their own skills and abilities and the availability of aircraft and suitable weather. Thus, the number of quarters needed to satisfactorily complete all of the requirements may exceed those listed above in some cases.*

### Multi-Engine Instructor Training (MEI) Certificate

The multi-engine instructor training allows the holder to update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements.

The multi-engine instructor training provides students with the principles of multi-engine flight and multi-engine instrument flight, including the operation, use, and limitations of the flight instruments and instrument navigation systems with a glass cockpit. Students will also learn how to deal with engine-out and the changes in aerodynamics. Multi-engine operations, systems, performance, instruments, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision-making, and instrument flight, will be studied.

AVP 218	Multi-Engine Instructor Training (MEI) Certificate	
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	Flight Hours	Hourly Rate with Fuel	Total
Aircraft Rental	10 hours (approximate)	\$348.53	\$3,485.30
Pre and Post Briefings	10 hours (approximate)	\$15	\$150
Dual Instruction	10 hours	\$55	\$550

Total Flight Fee Costs: \$4,185.30

\*Aircraft costs are aligned with current fuel market prices.

**Program Length**

This certificate program is approximately one quarter long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Summer, fall, winter, and spring quarters.

**Completion Requirements**

**Prerequisite(s)**

- Must be at least 18 years of age.
- Must comply with FAA licensing standards and possess an FAA Commercial certificate with Instrument Rating. Second-class FAA medical certificate required prior to first day of class.
- The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training.

**Program Course List**

AVP 218	Multi-Engine Instructor Certification MEI	3
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**Subtotal: 3**

## Retail Business Management

### Retail Business Management - Associate of Applied Technology Degree

The AAT Retail Business Management degree prepares students for careers in marketing, sales, retailing, customer service, entrepreneurship, and general business applications. Students develop both the technical and human relations skills necessary to succeed in today's competitive work environment. Current business procedures and computer applications, including online retail services, are covered.

The program combines business theory with practical applications that include the proper use of technology in today's workplace, ensuring students are making appropriate decisions in business settings. Students are introduced to e-commerce concepts and applications and learn how to use social media to invite potential customers to interact with their company.

This program has a built-in certificate component approved by the Western Association of Food Chains. This certificate prepares individuals to manage a variety of retail sales or lines of merchandise operations. The program serves both entry-level job candidates and incumbent employees. This certificate, endorsed by the Western Association of Food Chains (WAFC), provides grocery employees in Washington access to a consistent curriculum and also meets the needs of other segments of the retail industry.

#### Program Length

This program is offered online and is approximately five-to-six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

#### Admission Dates

Summer, fall, winter, and spring quarters.

#### Program Outcomes

- Evaluate multiple types of communications as they pertain to business practices.
- Analyze the primary components of the retail mix as they relate to best practices in the retail industry.
- Devise approaches for ethically dealing with dilemmas that arise in a business context.
- Apply human resource management principles in the recruitment, selection, placement and training of employees.
- Evaluate forces within business that influence marketing decisions and trends.
- Demonstrate effective sales techniques and team selling strategies.
- Analyze real-world examples of successful and unsuccessful electronic commerce companies, their accomplishments, their struggles, and their business practices.
- Apply current and relevant customer service strategies to encourage customer satisfaction and trust.
- Create social media strategies that achieve desired marketing goals.
- Apply consumer behavior theory to marketing strategies and tools in a retail environment.

#### Completion Requirements

##### Prerequisite(s)

None.

##### Program Course

RBM 105	Fundamentals of Organizational Behavior	3
RBM 107	Marketing	3
RBM 109	Principles of Retailing	3
RBM 111	Essentials of Business Communication	3
RBM 113CL	Business Technology for Retail Applications	3
RBM 115	Human Resource Management	3
RBM 117	Principles of Management	3
RBM 119	Financial Management	3
RBM 123	Customer Service	5
RBM 129	Speaking for Success	5
RBM 133	Effective Selling	5
RBM 159	E-Commerce Principles & Applications	4
RBM 162	Social Media Marketing	5
RBM 164	Marketing Communications	5
RBM 166CAP	Successful Career Development	5
RBM 168	Consumer Behavior	5
RBM 201	Introduction to Business	5

	Etiquette	
CAS 105	Keyboarding	3
BUS& 201	Business Law	5
	Any 100-Level Math Class	5
ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
	Or	
PSY 112DIV	Psychology of the Workplace	5
COLL 102	College Success for All	3
	<b>Subtotal: 94</b>	

**NOTE:**

*RBM 105 and RBM 109: Articulated courses with high schools for dual enrollment.*

## Retail Business Management Certificate

This certificate, endorsed by the Western Association of Food Chains (WAFC), provides grocery employees access to a consistent curriculum and also meets the needs of other segments of the retail industry.

The program serves both entry-level job candidates and incumbent employees.

### Program Length

The program is offered online and is approximately three-to-six quarters long, depending on full- or part-time attendance and the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Summer, fall, winter, and spring quarters.

### Completion Requirements

#### Prerequisite(s)

None.

**Important Note:** Taking the Accuplacer assessment or equivalent is not required for this certificate.

## Program Course List

RBM 105	Fundamentals of Organizational Behavior	3
RBM 107	Marketing	3
RBM 109	Principles of Retailing	3
RBM 111	Essentials of Business Communication	3
RBM 113CL	Business Technology for Retail Applications	3
RBM 115	Human Resource Management	3
RBM 117	Principles of Management	3
RBM 119	Financial Management	3
	<b>Subtotal: 24</b>	

*RBM 105 and RBM 109: Articulated courses with high schools for dual enrollment.*

### Optional Electives

CAS 105	Keyboarding	3
RBM 123	Customer Service	5
RBM 129	Speaking for Success	5
RBM 133	Effective Selling	5
RBM 159	E-Commerce Principles & Applications	4
RBM 162	Social Media Marketing	5
RBM 164	Marketing Communications	5
RBM 166CAP	Successful Career Development	5
RBM 168	Consumer Behavior	5
RBM 201	Introduction to Business Etiquette	5

## Surgical Technology

### Surgical Technology - Associate of Applied Technology Degree

Prepares students to work as part of a team of surgeons, anesthesiologists and registered nurses in the operating room. Successful graduates of this program are educated in surgical technology under the guidelines of the Association of Surgical Technologists.

The structured curriculum includes basic sciences, patient care, surgical procedures, and human anatomy combined with clinical rotations in area health care facilities. Classroom instruction, labs, and clinical internships prepare students to assume the role of a perioperative team member in a variety of health care delivery settings. Included in this program are academic courses in communication, quantitative reasoning, and social sciences that provide knowledge and abilities that enhance personal development and serve as a foundation for technical skills.

Students are required to carry personal health/medical insurance throughout their clinical rotations.

No student will be allowed at a clinical site without proof of insurance.

**Program Accreditation**

The Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) has granted accreditation to the Surgical Technology program upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

Commission on Accreditation of Allied Health Education Programs  
 9355 113th Street North, #7709  
 Seminole, FL 33775  
 Phone: 727-210-2350 Fax: 727-210-2354  
[www.caahep.org](http://www.caahep.org)

**Physical Activity Requirements**

Students cannot require use of assistive devices. This occupation requires the ability to stand, sit, and walk for extended periods of time and the ability to lift and hold 50 lbs. Students must be able to meet these physical requirements in order to complete lab requirements, be assigned to a clinical rotation and get a job in this field.

**Employability Requirements**

Most employers prefer national certification. Seven hours of AIDS education and training as required under WAC 246-939. A comprehensive background check will be conducted to screen for prior convictions prior to state registration.

Persons with some types of criminal convictions may not be eligible for employment.

**Program Length**

This program is a combination of on-line, classroom, laboratory and clinical experiences. It is approximately six quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Fall and spring quarters

**Completion Requirements**

**Prerequisite(s)**

Students pursuing the AAT degree must have a high school diploma or high school equivalency diploma, per the governing body for surgical technology, AST. In order to participate in the clinical aspect of the program, students must pass multiple background checks. A non-refundable fee is charged to each student for the background check. Students must have current American Heart Association CPR for the Healthcare Provider certification and immunizations or laboratory verification of immune status. This includes, but is not limited to, Covid, Hepatitis B series, Tetanus/Diphtheria, Tuberculosis Test, Measles/Mumps/Rubella, and Varicella, as required by contracts with clinical facilities and CDC recommendations. Proof of immunizations and CPR should be completed by the first day of class of the third quarter of the SURG courses. No student will be allowed at a clinical site without completion of immunizations. A physical is required for each student prior to clinical rotation. Must be at least 18 years of age by the time clinical experience starts, usually in September and April.

This program requires that the following general education courses be completed prior to beginning the first quarter of SURG courses. These general education courses are BIOL 241, CAH 102, COLL 102, CMST 220. Students must maintain a “B” or better in all general education and Core Allied Health courses.

Students must receive a “C” or better in all technical courses to satisfy graduation requirements. Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the requirements for diversity, computer literacy, and the capstone project.

**Program Course List**

BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5
CAH 102	Medical Terminology I	5
MAT 108	Math for Health Occupations	5
	Or	
MATH& 141	Precalculus I	5
	Or	
MATH& 142	Precalculus II, Functional Trigonometry	5
	Or	
MATH& 146	Introduction to Statistics	5
CMST& 220	Public Speaking	5
PSYC& 100DIV	General Psychology	5

	Or		
SOC& 101DIV	Introduction to Sociology	5	
	Or		
PSY 112DIV	Psychology of the Workplace	5	
CAS 115CL	Introduction to Computing	3	
COLL 102	College Success for All	3	
SURG 113	Introduction to Surgical Lab	8	
SURG 115	Introduction to the Surgical Environment	2	
SURG 120	Care of the Surgical Patient I	2	
SURG 133	Pharmacology & Anesthesia	5	
SURG 143	Surgical Lab I	8	
SURG 148	Operating Room Theory I	5	
SURG 150	Surgical Environment	2	
SURG 152	Care of the Surgical Patient II	2	
SURG 158	Surgical Lab II	8	
SURG 154	Operating Room Theory II	5	
SURG 201	Operating Room Theory III	5	
SURG 205	Clinical Preparation	2	
SURG 213	Microbiology for the Surgical Technologist	5	
SURG 220	Clinical Applications II	5	
SURG 210	Surgical Lab III	8	
SURG 215	Clinical Applications I	5	
SURG 225	Clinical Applications III	5	
SURG 230	Clinical Applications IV	5	
SURG 235	Seminar I	3	
SURG 237	Certification Test Preparation I	2	
SURG 240CAP	Seminar II	3	
SURG 242	Certification Test Preparation II	2	

**Subtotal: 133**

*Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam.*

## Upholstery

### Upholstery Fundamentals Certificate

This two-quarter program is designed to provide graduates with a foundation in measuring, cutting, and sewing using industrial sewing machine equipment. Students will also learn how to set up an efficient workstation for upholstery work and the basics of sewing machine maintenance. Students will continue to develop basic upholstery skills, speed, and accuracy in the second quarter

while working on projects such as furniture pillows and automotive seat covers. This certificate is a prerequisite to the Automotive Upholstery Certificate and Furniture Upholstery Certificate.

#### Program Length

This program is approximately two quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

#### Admission Dates

Fall and Spring quarters.

#### Program Outcomes

- Use hand and power tools safely.
- Troubleshoot commercial sewing machines in order to keep them operational.
- Organize an efficient upholstery work station.
- Operate a commercial sewing machine with safety, speed, and accuracy.
- Construct cushions, pillows, and automotive inserts that meet industry standards.

#### Completion Requirements

#### Prerequisite(s)

None.

#### Program Course List

UPH 101	Introduction to Upholstery I	4
UPH 103	Introduction to Upholstery II	4
UPH 105	Basic Sewing I	4
UPH 107	Basic Sewing II	4
UPH 109	Intermediate Sewing I	4
UPH 111	Intermediate Sewing II	4
UPH 113	Advanced Sewing I	4
UPH 115	Advanced Sewing II	4
COLL 102	College Success for All	3

**Subtotal: 35**

### Automotive Upholstery Certificate

This three-quarter program builds on the skills learned in the Upholstery Fundamentals Certificate and provides students with lessons and project-based learning specific to the automotive upholstery industry. Students will learn how to remove and re-upholster specific automotive interior elements such as doors and quarter panels, bucket seats, bench seats, headliners, carpets, and convertible tops.



**Program Length**

This program is approximately three quarters long, depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Remove automotive seat covers in preparation for patterning.
- Calculate all materials needed to complete an interior.
- Construct automotive bucket seat covers and headrests.
- Re-install completed parts.
- Create a new interior for a vehicle.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of Upholstery Fundamentals Certificate or instructor’s permission.

**Program Course List**

UPH 118	Doors and Quarter Panels I	4
UPH 120	Doors and Quarter Panels II	4
UPH 122	Bucket Seats I	4
UPH 124	Bucket Seats II	4
UPH 126	Bench Seats I	4
UPH 128	Bench Seats II	4
UPH 132	Headliners	4
UPH 136	Carpets	4
UPH 140	Convertible Tops	4
UPH 200	Special Projects	4
COLL 102	College Success for All	3
<b>Subtotal: 43</b>		

**Furniture Upholstery Certificate**

This three-quarter program builds on the skills learned in the Upholstery Fundamentals Certificate and provides students with lessons and project-based learning specific to the furniture upholstery industry. Students will learn how to remove and re-upholster specific furniture pieces such as Louis chairs, wing back chairs, and sofas. Additionally, students will learn specific techniques used in furniture upholstery such as diamond tufting, tying springs, and design and construction of a headboard.

**Program Length**

This program is approximately three quarters long,

depending on the time students need to satisfactory complete all graduation requirements. Must have required tools and textbooks.

**Admission Dates**

Fall and spring quarters.

**Program Outcomes**

- Differentiate the various types of chairs to utilize the correct upholstery techniques.
- Remove old upholstery safely, without damaging the furniture.
- Calculate all materials needed to complete an upholstered piece.
- Evaluate which types of foams and fabric are best for the given project.
- Create a usable, fashionable piece of furniture.

**Completion Requirements**

**Prerequisite(s)**

Successful completion of Upholstery Fundamentals Certificate or instructor’s permission.

**Program Course List**

UPH 145	The Art of Tying Springs	3
UPH 150	Upholstering a Louis-Type Chair I	4
UPH 155	Upholstering a Louis-Type Chair II	4
UPH 160	Upholstering a Wingback Chair I	4
UPH 165	Upholstering a Wingback Chair II	4
UPH 170	Upholstering a Sofa I	4
UPH 175	Upholstering a Sofa II	4
UPH 180	Diamond Tufting	4
UPH 183	Pillow Backs	4
UPH 189	Design and Construction of a Headboard	4
COLL 102	College Success for All	3
<b>Subtotal: 42</b>		

**Welding**

**Welding Associate of Applied Technology Degree / Associate in Applied Science – T Degree**

This program is designed to develop the technical knowledge and skills required for employment in welding,

metal fabrication, and related occupations. Graduates may qualify for many different opportunities within manufacturing, industrial maintenance, and construction.

Students will develop skills in a variety of welding and metal cutting processes common to industry and are also able to gain practical experience through realistic projects.

MAT 092 and ENG 091 are required classes to enter the welding program. Other academic classes will be embedded in the program scope and sequence that are required for completion of the program.

Students pursuing an AAT or AAS-T degree must complete all college degree requirements prior to graduation. This includes courses that meet the capstone project, diversity, and computer literacy requirements.

**Program Length**

This program is approximately five quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

**Admission Dates**

Morning/Afternoon/Evening/Weekend programs: Summer, fall, winter, and spring quarters, or by instructor’s permission.

**Completion Requirements**

**Prerequisite(s)**

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

**Program Course List**

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 117	Shielded Metal Arc Welding I	7
WLD 123	Shielded Metal Arc Welding II	7
WLD 143	Materials and Testing	5
WLD 144	Print Reading for Welders	5
WLD 152	Gas Metal Arc Welding	7
WLD 157	Metallurgy	5
WLD 168	Flux Cored Arc Welding I	7
WLD 210	Gas Tungsten Arc Welding	7
WLD 220CAP	Special Projects I	7
	Welding Electives	28
		<b>Subtotal: 97</b>

Welding Electives: See list below

**Welding Electives**

Students must take 28 credits. Students must select four elective courses from the list below:

WLD 211	Advanced Gas Tungsten Arc Welding I (GTAW)	7
WLD 214	Advanced Gas Tungsten Arc Welding II	7
WLD 223	GTAW Pipe Welding	7
WLD 225	Shielded Metal Arc Welding Pipe	7
WLD 227	Advanced Pipe Welding	7
WLD 229	Metal Forming	7
WLD 230	Special Projects II	7
WLD 233CAP	Layout and Fabrication	7
WLD 235CAP	WABO Test Prep	7
WLD 299 CAP	Advanced Concept Design and Fabrication	7
		<b>Subtotal: 100</b>

**AAT Degree Requirements**

Technical Course Requirements	97
AAT General Education Requirements	18
Computer Literacy Requirement	3
<b>Subtotal: 118</b>	

AAT Degree General Education Requirements: See list below

Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam

**AAS-T Degree Requirements**

Technical Course Requirements	97
AAS-T Degree General Education Requirements	23
Computer Literacy Requirement	3
<b>Subtotal: 123</b>	

AAS-T Degree General Education Requirements: See list below

Computer Literacy Requirement: Complete an approved computer literacy course or successfully pass the computer literacy exam

**General Degree Requirements**

In addition to the program course requirements, students must also complete the general education requirements for the degree they seek to obtain. The two degree options in

this program are the Associate of Applied Technology (AAT) and the Associate in Applied Science – T (AAS-T). The different requirements for each degree are listed below.

#### AAT Degree General Education Requirements (18 credits)

ENGL& 101	English Composition I	5
	Or	
CMST& 220	Public Speaking	5
	Any 100-Level Math Class	5
PSYC& 100DIV	General Psychology	5
	Or	
SOC& 101DIV	Introduction to Sociology	5
COLL 102	College Success for All	3

#### AAS-T Degree General Education Requirements (23 credits)

All AAS-T degrees must have a minimum of 20 credits of transferable general education. These credits replace the academic courses required for the AAT degree. Required credits include:

##### 5 credits in communication:

ENGL& 101	English Composition I	5
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##### 5 credits in quantitative reasoning:

MATH& 107	Math in Society	5
MATH& 141	Precalculus I	5
MATH& 142	Precalculus II, Functional Trigonometry	5
MATH& 146	Introduction to Statistics	5
MATH& 151	Calculus I	5

##### 5 credits in a social science that meets the diversity requirement:

PSYC& 100DIV	General Psychology	5
SOC& 101DIV	Introduction to Sociology	5

##### 5 credits in social science, humanities, or science

choose one from the following:

ART& 100	Art Appreciation	5
ASL& 121	American Sign Language I	5
ASL& 122	American Sign Language II	5
BIOL& 160	General Biology w/Lab	5
BIOL& 175	Human Biology w/Lab	5
BIOL& 241	Human A & P I	5
BIOL& 242	Human A & P II	5

BIOL& 260	Microbiology	5
CHEM& 110	Chemical Concepts w/Lab	5
CHEM& 121	Intro to Chemistry	5
CHEM& 131	Introduction to Organic/Biochemistry	5
CMST& 220	Public Speaking	5
GEOL& 110	Environmental Geology with Lab	5
HIST& 146	US History I	5
HIST& 147	US History II	5
HIST& 148	US History III	5
HUM& 101	Introduction to Humanities	5
MUSC& 105	Music Appreciation	5
PHYS& 114	General Physics I with Lab	5
POLS& 202	American Government	5
PSYC& 100DIV	General Psychology	5
PSYC& 200	Lifespan Psychology	5
PSYC& 220	Abnormal Psychology	5
SOC& 101DIV	Introduction to Sociology	5

##### 3 credits in College Success:

COLL 102	College Success for All	3
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## Basic Welding Certificate

This program prepares students for entry-level positions in welding as an apprentice or shop helper. The competency based curriculum combines classroom instruction with hands-on training to develop foundational knowledge and skill in select welding and cutting processes.

### Program Length

This certificate program is approximately two quarters long. The program can take five to eight quarters depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

#### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3

WLD 114	Industrial Machinery	4
WLD 117	Shielded Metal Arc Welding I	7
WLD 152	Gas Metal Arc Welding	7
COLL 102	College Success for All	3

**Subtotal: 29**

## Shielded Metal Arc Welding Certificate

Prepares students for employment in positions requiring specialization in Shielded Metal Arc Welding (SMAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

#### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 117	Shielded Metal Arc Welding I	7
WLD 123	Shielded Metal Arc Welding II	7
COLL 102	College Success for All	3

**Subtotal: 29**

## Gas Tungsten Arc Welding Certificate

Prepares students for employment in positions requiring specialization in Gas Tungsten Arc Welding (GTAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the necessary knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission

### Completion Requirements

#### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 210	Gas Tungsten Arc Welding	7
WLD 211	Advanced Gas Tungsten Arc Welding I (GTAW)	7
WLD 214	Advanced Gas Tungsten Arc Welding II	7
COLL 102	College Success for All	3

**Subtotal: 36**

## Gas Tungsten Arc Welding (GTAW) Pipe Certificate

Prepares students for employment in positions requiring specialization in Gas Tungsten Arc Welding pipe (GTAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the necessary knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

#### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

#### Program Course List

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 210	Gas Tungsten Arc Welding	7

WLD 211	Advanced Gas Tungsten Arc Welding I (GTAW)	7
WLD 223	GTAW Pipe Welding	7
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

## Shielded Metal Arc Welding Pipe Certificate

Prepares students for employment in positions requiring specialization in Shielded Metal Arc Welding Pipe (SMAW). The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

### Program Course List

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 117	Shielded Metal Arc Welding I	7
WLD 123	Shielded Metal Arc Welding II	7
WLD 225	Shielded Metal Arc Welding Pipe	7
COLL 102	College Success for All	3
<b>Subtotal: 36</b>		

## Wire Feed Welding Certificate

Prepares students for employment in positions requiring specialization in Gas Metal Arc Welding (GMAW) and FCAW. The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

### Program Course List

WLD 106	Welding Theory	5
WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 152	Gas Metal Arc Welding	7
WLD 168	Flux Cored Arc Welding I	7
COLL 102	College Success for All	3
<b>Subtotal: 29</b>		

## Layout & Fabrication Welding Certificate

Prepares students for employment in positions requiring specialization in print reading, performing layouts, fitting up parts and fabricating weldments. The competency-based curriculum combines classroom instruction with extensive hands-on training to develop the essential knowledge and skills for industry.

### Program Length

This certificate program is approximately two quarters long, depending on the time students need to satisfactorily complete all graduation requirements.

### Admission Dates

Daytime/Afternoon/Evening programs: Summer, fall, winter, and spring quarters, or by instructor's permission.

### Completion Requirements

### Prerequisite(s)

Minimum Accuplacer arithmetic score of 280 or equivalent or successful completion of MAT 092.

### Program Course List

WLD 110	Thermal Cutting & Gouging	3
WLD 114	Industrial Machinery	4
WLD 144	Print Reading for Welders	5

WLD 223	GTAW Pipe Welding	7
WLD 299	Advanced Concept Design and Fabrication	7
CAP		
COLL 102	College Success for All	3
	<b>Subtotal:</b>	<b>29</b>

# Courses

## ACT - Automotive Collision Technician

### ACT 102 - Fundamentals of Collision Repair (3)

Explores career safety, industry certifications, vehicle construction, and an overview of the career field.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement. Corequisite: IAUT 104, IAUT 115, IAUT 130, and IAUT 140. MAT 092 or meet appropriate placement. Instructor's permission required.

### ACT 106 - Body Shop Equipment (3)

Covers operating hand tools, power tools, and shop equipment. Explores air systems and their design and function.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 110 - Welding, Heating, & Cutting (4)

Covers the skills of welding, heating, and cutting as they relate to the collision industry.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 115 - Plastics/SMC Repair (4)

Explores plastic, fiberglass, and SMC repairs as they relate to the collision industry.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 120 - Glass, Trim, & Hardware (5)

Covers the practical skills used to repair and replace door locks and windows and to repair water leaks on car and truck bodies, interior parts, and door skin.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 125 - Introduction to Metal Straightening (3)

Introduces basic body-panel straightening techniques.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 132 - Panel Replacement (6)

Covers the fundamentals of replacing hoods, bumpers, fenders, grilles, lids, and other bolted-on panels.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 133 - Panel Repair (6)

Covers metal-straightening fundamentals including proper tool usage, application of fillers, and sanding for proper size, shape, and texture.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 134CAP - Auto Collision Major Repair (5)

Introduces vehicle damage measuring systems, straightening auto body structure, and replacing structural components.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 141 - Auto Body Aluminum Repair (4)

This course is an introduction to aluminum body repair.

Prerequisite: No Prerequisite.

### ACT 145 - Collision Estimating (5)

Covers collision damage estimating, reviewing work orders, and acquiring work skills for job success.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### ACT 151 - Refinish Equipment Preparation (6)

Covers paint-shop equipment and painting fundamentals.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

**ACT 154 - Topcoat Refinishing (8)**

Covers color matching, final masking, surface cleaning, and topcoat finishing.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

**ACT 156 - Pre-Prime Preparation (5)**

Explores corrosion protections and vehicle refinish preparation.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

**ACT 157 - Post-Prime Preparation (5)**

Explores final preparations, blocking, and final sanding for application of topcoat.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

**ACT 166CAP - Surface Imperfections/Exterior Trim (5)**

Covers paint application problem solving, final detailing, decals, and trimming.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

**ACT 171 - Plastic Refinishing (5)**

Covers paint-shop equipment and painting fundamentals as they relate to plastics.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

**ACCT - Accounting****ACCT& 201 - Principles of Accounting I (5)**

Covers fundamentals of accounting theory and practice, including a study of the accounting cycle and the use of special journals. Focus is on double-entry accounting system and financial statement preparation. Covers transactions for a business organized as a sole proprietorship and the effects of transactions on balance sheet accounts.

Prerequisite: ACTG 115 or instructor's approval.

Corequisite: ACTG211 recommended.

**ACCT& 202 - Principles of Accounting II (5)**

Covers fundamentals of accounting theory and practice, continued from ACCT& 201. Focus is on issues related to businesses organized as a partnership or corporation and their effects on balance sheet accounts. Also covers investment, dissolution, and distribution of income.

Prerequisite: ACCT& 201 or instructor's approval.

Concurrent enrollment requirement ACTG 212.

**ACCT& 203 - Principles of Accounting III (5)**

Introduces the theory of cost accounting and an analysis of accounting data as a part of the managerial process of planning, decision-making, and control. Emphasizes job order, process, standard-cost accounting data, and the preparation and use of budgets and internal control reports necessary for making economic decisions for manufacturing businesses.

Prerequisite: ACCT& 201 or instructor's approval.

Corequisite: none.

**ACTG - Accounting****ACTG 110 - Bookkeeping I (4)**

Introduces fundamental principles of full-cycle, double entry accounting, including maintaining journals, ledgers, and banking records to prepare basic financial statements for service and retail businesses organized as sole proprietorships or partnerships. Explores the concepts and terminology required to perform specific accounting functions accurately. Working knowledge of computer literacy to include file management, cloud storage, browsers, and search engines recommended.

Prerequisite: Completion of MAT 092 or higher and completion of ENG 091 or higher or instructor approval. Corequisite: None.

**ACTG 115 - Bookkeeping II (4)**

Introduces continued principles of full cycle, double-entry accounting. Covers specialty issues, such as uncollectible accounts, depreciation, inventory notes, interest accruals, and end-of-period work for corporations. Also covers basics of payroll accounting and payroll tax reports. Students will maintain journals and ledgers to prepare basic financial statements for a retail business organized as a corporation and identify the concepts and terminology required to perform specific accounting functions



accurately.

Prerequisite: None. Corequisite: Concurrently enrolled in ACTG 110 - Bookkeeping I or instructor approval.

### **ACTG 120 - Electronic Business Math (2)**

Covers business math applications, including payroll, percents, merchandising, consumer credit, simple and compound interest, prorating, stocks and bonds, and the metric system, using keyboard functions and the touch method of electronic calculator operation.

Prerequisite: Completion of MAT 092 or higher and completion of ENG 091 or higher or instructor approval. Corequisite: none.

### **ACTG 135 - Accounting Spreadsheets I (5)**

Introduces electronic spreadsheets (Microsoft Office Excel). Covers creating business forms and spreadsheets to prepare financial statements. Working knowledge of computer literacy to include file management, cloud storage, browsers, and search engines recommended.

Prerequisite: None. Corequisite: Concurrent with ACTG 110 or instructor's approval.

### **ACTG 137 - Accounting Digital Office (3)**

Learn the fundamental applications in Word, Access and PowerPoint in the context of an Accounting business. Create Word documents such as client letters, resumes, and credit/collection letters that clearly communicate financial information; utilize and run custom financial reports using the Access database, and create intriguing presentations to educate clients and perspective clients. Working knowledge of computer literacy to include file management, cloud storage, browsers, and search engines recommended.

Prerequisite: None. Corequisite: None.

### **ACTG 141 - QuickBooks I (2)**

Covers principal applications, basic operating commands, and functions necessary to use QuickBooks automated accounting software. Basic applications include, but are not limited to, vendor, customer, and banking activities and creating files.

Prerequisite: Successful completion of ACTG 110, or instructor's approval.

### **ACTG 143 - QuickBooks II (3)**

Covers continued applications for vendor and customer activities using QuickBooks automated accounting

software. Also covers starting up companies, inventory management, sales tax, payroll, and working with balance sheet accounts.

Prerequisite: ACTG 141 and ACTG 115, or instructor's approval.

### **ACTG 145 - Quickbooks (5)**

Covers principal applications, basic operating commands and functions necessary to use Quickbooks automated accounting software. Basic applications include but are not limited to vendor, customer, banking activities, creating new companies, inventory management, sales tax, payroll, and working with balance sheet accounts.

Prerequisite: Basic Bookkeeping or Instructor Approval. Corequisite: None.

### **ACTG 160 - Payroll & Business Taxes (5)**

Provides practice in all payroll operations, the recording of accounting entries involving payroll, and the preparation of required payroll and business tax returns. Covers the concepts, laws, and terminology required to perform specific payroll accounting functions.

Prerequisite: ACTG 115 or instructor approval. Corequisite: none.

### **ACTG 211 - Principles of Accounting I Lab (2)**

Provides instructional activities that support material covered in ACCT& 201 in a supervised lab environment.

Prerequisite: ACTG135 or instructor approval. Corequisite: Concurrent enrollment in or prior completion of ACCT& 201 Accounting Principles I.

### **ACTG 212 - Principles of Accounting II Lab (3)**

Provides instructional activities that support material covered in ACCT& 202 in a supervised lab environment.

Prerequisite: Successful completion of ACTG 211 and ACTG 135 or instructor's approval.

### **ACTG 224 - Fundamentals of Governmental/Nonprofit Accounting (5)**

Introduces the fundamentals of accounting theory and practice of government/nonprofit accounting, including a study of accounting methods; the reasons for and the use of the various funds; the purpose and use of budgets in this field of accounting; and the differences between generally accepted accounting principles, GASB standards, and fund/ governmental accounting.

Prerequisite: Successful completion of ACTG 115 and ACCT& 201 or instructor's approval.

#### **ACTG 260 - Business Office I (5)**

Provides an opportunity for students to experience and participate in a realistic office environment by providing financial statements, completing financial examinations, preparing payroll, and furnishing other similar financial accounting work products.

Prerequisite: Successful completion of ACTG143, ACTG137, ACTG135 and ACCT& 201, or instructor's approval. Corequisite: None.

#### **ACTG 262CAP - Business Office II (5)**

Provides an opportunity for students to experience and participate in a realistic office environment by providing financial statements, completing financial examinations, preparing payroll, and furnishing other similar financial accounting work products or working in industry.

Prerequisite: Successful completion of ACTG 260 or instructor's approval. Corequisite: none.

#### **ACTG 291 - Individual Income Tax Accounting (5)**

Continues the study of the fundamentals of individual income tax accounting theory and practice, including a detailed study of the rules and regulations for preparation of the most common forms and schedules, preparation of these forms and schedules, tax laws in the United States, and the differences between generally accepted accounting principles and income-tax accounting.

Prerequisite: Successful completion of ACCT& 201, or instructor's approval. Concurrent with ACTG 294.

#### **ACTG 294 - Individual Income Tax Accounting Lab (3)**

This lab provides a supervised setting, with instructional support, to apply understanding of federal individual income tax rules and regulations to specific tax problems. Students will be able to handle different tax scenarios and complete the appropriate forms needed to file the individual income tax returns in accordance with the Internal Revenue Service standards.

Prerequisite: ACCT& 201 or instructor approval, ACTG 291 (concurrent enrollment allowed).

## **AMT - Aviation Maintenance Technician**

#### **AMT 104 - Basic Mathematics, Basic Physics, and Weight & Balance (5)**

Perform all of the mathematical computations required in the Aviation Maintenance Technician curriculum. Understand the scientific principles that apply to the operation of aircraft, engines, and the equipment that aviation maintenance technicians are in daily contact with. Develop a comprehensive understanding of the importance of weight and balance to aircraft safety, and make all of the required calculations for weight and balance checks, equipment changes, extreme loading checks, and the addition of ballast.

#### **AMT 109 - Basic Electricity (4)**

Covers direct-current circuits, series, and parallel-circuit arrangements and their application. Includes the relationship between voltage, current, resistance, and power. Students will calculate and measure these values and understand the operation of the multimeter and its use in troubleshooting.

#### **AMT 116 - Aircraft Drawings, Cleaning & Corrosion Control, Ground Operations & Servicing, and Fluid Lines & Fittings (5)**

Sketch aircraft repairs and alterations and understand information presented on typical aircraft blueprints, graphs, and charts. Recognize types of corrosion and know their causes, identify and use the proper materials and processes to remove corrosion byproducts, treat corroded areas, and apply proper protection. Gain a thorough understanding of the importance of safe ground handling procedures, aircraft movement, and storage, and identify aviation fuels. Identify fluid line components, fabricate rigid and flexible fluid lines, and properly install fluid lines on aircraft.

#### **AMT 119 - Materials & Processes (5)**

Learn about identification and selection of non-destructive testing methods, dye-penetrant, eddy current, ultra-sound, and magnetic particle inspections, as well as basic heat-treated processes, aircraft hardware, and materials. Inspect and check welds. Perform precision measurements.

#### **AMT 125 - Advanced Electricity (4)**

Understand the effect of resistance, capacitance, and inductance in AC circuits, and understand transformers. Learn about basic semi-conductor devices (diodes and

transistors), and be able to explain their function in simple circuits.

**AMT 127 - Maintenance Forms & Records, Publications, and Mechanics Privileges & Limitations (4)**

Use maintenance records and entries, maintenance forms, and inspection reports. Requires reading, comprehension, and application of information from the FAA and manufacturer's maintenance specifications, data sheets, manuals, publications, related FAA regulations, airworthiness directives, and advisory material. Apply mechanic privileges within the limitations prescribed by FAR Part 65.

**AMT 132 - Wood Structures, Aircraft Coverings, & Finishes (4)**

Covers wood aircraft construction, repair, and inspection. Students will select, apply, inspect, test, and repair aircraft fabric and fiberglass covering materials. Become familiar with types of aircraft protective coatings, trim applications, markings, finish problems, and the inspection of finishes.

**AMT 133 - Aircraft Fuel Systems, Ice & Rain Control Systems, & Fire Protection Systems (4)**

Covers principles of operation and configuration of warning systems, electrical brake controls, anti-skid systems, and landing gear position indicating and warning systems. Learn the effects of ice and rain on aircraft during operations in inclement weather, the equipment and materials used to counter ice and rain, and the maintenance of this equipment. Explore components and operation of fire detection and extinguishing equipment, as well as smoke and toxic gas detection systems.

**AMT 135 - Sheet Metal Structures (4)**

Inspection and repair of all types of sheet metal. Information regarding the fabrication, construction, and repair of sheet-metal aircraft structures.

**AMT 136 - Welding, Position & Warning Systems (3)**

Principles regarding the fabrication, construction, and repair of welded aircraft structures. Principles of operation of speed and configuration warning systems, electrical brake controls, anti-skid systems, and landing-gear position indicating and warning systems.

**AMT 137 - Non-Metallic Structures (4)**

Covers inspection and repair of all types of non-metallic and composite structures, including transparent plastic enclosures and interiors.

**AMT 138 - Aircraft Inspections (4)**

Lecture, demonstration, and practical application are used to train students in the methods and techniques of all phases of aircraft inspections, federal aviation regulations, maintenance record entries, and disposition of those records including Human Factors.

Prerequisite: None. Corequisite: None.

**AMT 139 - Assembly & Rigging (4)**

Covers basic information regarding the assembly of aircraft, components, rigging of all flight control surfaces, balancing and inspection of flight controls, alignment of aircraft structures, and jacking of aircraft.

**AMT 140 - Aircraft Landing Gear (3)**

Inspect, check, service, and repair landing gear retraction systems, shock struts, brakes, wheels, tires, and steering systems.

**AMT 141 - Hydraulic & Pneumatic Power Systems (3)**

Inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems and components. Identify and select hydraulic fluids.

**AMT 142 - Hangar Operations & Maintenance (3)**

Perform maintenance on items of shop equipment used in the day-to-day operation of the aircraft maintenance hangar, calibrate precision tools as needed, and assist in repair station operations. Note: Offered winter quarter. Not FAA approved.

**AMT 143 - Airframe Electrical Systems (5)**

Learn about operation of AC and DC electrical systems used on large and small aircraft, generating and starting systems, AC and DC electric motors, wiring, controls, switches, indicators, and protective devices, and constant speed and integrated drive generators.

**AMT 144 - Engine Electrical Systems (5)**

Develop an understanding of the operation of generators, alternators, DC motors, and AC motors, and their repair and overhaul. Learn the special requirements of electrical components operating in high-temperature areas and how to install wiring, controls, switches, and indicators, and to protect them from the effects of high temperatures.

**AMT 145 - Cabin Atmosphere Control Systems (3)**

Physiological aspects of flight. Inspection and maintenance of oxygen, pressurization, heating, cooling and air-

conditioning systems.

### **AMT 146 - Aircraft Instrument, Communication & Navigation Systems (3)**

Learn principles of operation of common aircraft instruments, air- or vacuum-driven gyros, pilot-static systems, and static system leak tests. Gain operating principles of common avionics equipment, antennas, autopilots, servos, approach coupling systems, interphones, static discharge devices, and ground proximity warning systems. Inspect and repair antennas and electronic equipment.

### **AMT 208 - Helicopter Operations & Maintenance Practices (4)**

Covers history, operations, regulations, publications, records, special-use equipment, and basic maintenance fundamentals as they relate to rotorcraft.

### **AMT 210 - Basic Rotor Systems Maintenance & Repair (4)**

Covers history of rotorcraft and principles of flight, types, and function of rotor systems, overhaul of rotor hub assemblies, installation and static balancing of rotors, types and function of anti-torque control systems, and inspection of rotor blades using manufacturer's data.

### **AMT 212 - Advanced Rotor Systems Maintenance & Repair (4)**

Covers vibration analysis, installation and dynamic balancing of rotor systems, tracking of helicopter rotor blades, principles of helicopter auto-rotation, and adjustment of auto-rotation RPM for power-off operations.

### **AMT 215 - Helicopter Systems (4)**

Covers helicopter power plants and controls; fuel systems, turbine fuels, and fuel system components; oil systems and types of oils; mechanical drives, clutches, drive shafts, freewheeling units, and transmissions; flight controls, hydraulic, and instrument systems; rotor RPM, engine-out, and master caution and warning systems; electrical systems, NiCad batteries, and starter generators; fuselage structures; and landing gear.

### **AMT 217 - FAA Testing & Turbine Engines (7)**

Covers preparation for and completion of FAA certification examinations. FAA written examinations are accomplished outside of CPTC at an FAA Designated Written Examination Center. After successful completion of written examinations, students must pass an oral and practical examination administered by an FAA Designated

Maintenance Examiner. Students are charged a fee for these examinations. Note: Fees for these examinations are not included in the college tuition or lab fees.

The remaining 120 hours of training concentrate on turbine engines, including their history, different types, the theory of operation of turbine engines, the Brayton cycle, Bernoulli's theory, and turbine engine air-flow characteristics. Learn the theory of operation of different types of compressors, combustion chambers, turbines and turbine stator vanes (nozzles). Learn the exhaust sections maintenance of turbine engines, including turbine engine removal, overhaul, inspection, and repair procedures. Learn to install turbine engines; make adjustments; troubleshoot, test, and check run procedures; and become familiar with regulations, publications, and records for turbine engines.

### **AMT 219 - Engine Lubrication Systems (4)**

Covers the components and the operation of engine lubrication systems. Introduction to the requirements and characteristics of engine lubricants and lubrication systems.

### **AMT 221 - Engine Instrument Systems (4)**

Covers the theory and principles of operation of electrical and mechanical fluid rate-of-flow indicating systems. Covers electrical and mechanical temperature, pressure, and RPM-indicating systems.

### **AMT 224 - Powerplant Reciprocating Engine Theory (6)**

Covers the history of aircraft engines, principles of energy transformation, theory of operation, engine requirements and configuration, and overhaul of horizontally-opposed engines.

### **AMT 225 - Powerplant Maintenance & Operation (6)**

Powerplant maintenance and operation consists of theory of operation; engine requirements, configuration and installation; and troubleshooting and removal of horizontally-opposed engines.

### **AMT 226 - Engine Fuel System & Fire Protection (1)**

Fuel systems and fire protection consists of transformation of energy, chemistry of combustion, and thermal efficiency of fuel-air mixtures. Fire protection covers the components and the operation of fire-detection and extinguishing equipment.

### **AMT 228 - Engine Fuel Metering Systems (5)**

Fuel metering consists of the principles of fuel metering for float carbs, pressure carb, fuel injection, anti-detonation injection, turbine fuel controls, and electronic engine-fuel controls.

### **AMT 229CAP - Propellers & FAA Final Testing (4)**

Consists of the theory of operation and nomenclature; propeller controls and instrumentation; fixed pitch, controllable pitch, constant speed, and feathering propellers; governors, anti-ice, phasing, and synchronization systems; and inspection, maintenance, and repairs to propellers and related systems, including familiarization with unducted fan engines.

At the end of the course, six hours are devoted to preparation for FAA certification examinations. FAA written examinations are taken at an FAA Designated Written Examination Center. After successful completion of written examinations, students must pass an oral and practical examination administered by an FAA Designated Mechanics Examiner. Students are charged a fee for these examinations administered by FAA designated examiners and centers. Fees for these examinations are not included in the college tuition or lab fees systems.

### **AMT 231 - Engine Inspection (4)**

Engine inspection consists of detailed work with FAA regulations, types of inspections, conformance to type certificate data sheets and major alterations, airworthiness directives, and maintenance record entries.

### **AMT 233 - Engine Ignition & Starting Systems (4)**

Covers the operation, maintenance, and overhaul of magnetos and ignition; harnesses; the inspection, servicing, troubleshooting, and repair of reciprocating and turbine engine ignition system; and components and turbine engine electrical and pneumatic starting systems.

### **AMT 235 - Induction, Airflow, Cooling & Exhaust Systems (3)**

Learn about the maintenance of carburetors and fuel-injected, naturally aspirated, turbo-charged, and super-charged induction systems. Learn about maintenance of ice and rain control systems, as well as principles of air-cooled engines and problems that can occur with an air-cooled engine. Study the history, development, and function of exhaust systems. Students will describe, inspect, maintain, troubleshoot, and repair components of exhaust systems. Learn operation principles of turbine-engine reversing systems and power recovery turbines.

### **AMT 239 - Advanced Hangar Operations & Maintenance (3)**

Advanced hangar operations and maintenance is designed for students currently enrolled in the helicopter and powerplant classes. It includes servicing and repair of shop equipment, calibration of precision tools, and assisting in the repair station operations.

## **ARC - Architectural Engineering Design**

### **ARC 120 - Residential Drafting & Design I (4)**

Overview of the design industry, construction procedures, codes, guidelines and standards, elements and principles of design, spatial concepts, and energy efficiency in design.

Prerequisite: None. Corequisite: None.

### **ARC 124 - Residential Drafting & Design II (5)**

Overview of site factors and legal regulations affecting design, site plans, residential floor plans, symbols and systems, electrical plans, plumbing plans, HVAC plans, and roof plans.

Prerequisite: Successful completion of ARC 120, ARC 171, and ARC 183, or instructor approval.

### **ARC 126 - Residential Drafting & Design III (5)**

Overview of specialized Construction Documents: Exterior Elevations; Cabinet and Interior Elevations; foundation systems and plans; and framing methods and plans. Students will create drawings using industry standard CAD software.

Prerequisite: Successful completion of ARC 124 or instructor's approval.

### **ARC 146 - Detailing and Light Construction (4)**

Students will be introduced to concepts and common terminology used in light wood- framed construction. Students will produce standard details of structural design for residential applications using CAD software.

Prerequisite: Successful completion of ARC 124 or instructor's approval.

### **ARC 150 - Construction Materials Research (4)**

Students will investigate and research: materials, methods, and trends in construction; the Construction Specification Institute's (CSI) MasterFormat, SectionFormat, and PageFormat systems; and methods of specifying.

Prerequisite: Successful completion of ARC 120, ARC 171, and ARC 183, or instructor's approval.

#### **ARC 171 - Drafting Technologies I (5)**

Overview of basic manual drafting skills; architectural lines, text and layers; isometric drawings; orthographic and Multiview projections; and roof plan layout and components.

Prerequisite: None. Corequisite: None.

#### **ARC 175 - Civil Engineering (4)**

An introduction to civil engineering software. Students will learn to create, edit and modify civil CAD design objects, add annotation, obtain information, and import other software data into Civil CAD applications.

Prerequisite: Successful completion of ARC 120 and ARC 183, or instructor's approval.

#### **ARC 183CL - Introduction to CAD Drafting (4)**

An introduction to CAD software. You will learn to utilize the fundamentals of CAD software to produce basic architectural drawings.

Prerequisite: None. Corequisite: None.

#### **ARC 192 - Engineering Mechanics of Materials (4)**

Students will apply basic engineering used in the building design field: forces, force systems, loading and reactions; material stress and strain; selection of wood columns and wood connection materials; steel structural materials; and reinforced concrete materials.

Prerequisite: Successful completion of ARC 126 and MAT 094 or higher, or instructor's approval.

#### **ARC 219 - Residential Drafting & Design IV (4)**

Overview of design criteria for structural loading; section and detail drawings; stair and fireplace construction; commercial building codes; and materials for commercial construction. Students will create drawings using industry standard CAD software.

Prerequisite: Successful completion of ARC 126, or instructor's approval.

#### **ARC 223 - Design Project I (5)**

Project management and design of a single-family residence compliant with current state building and energy codes, all based on the needs of a hypothetical client. Project will be designed using current 3D modeling

software (Revit).

Prerequisite: Successful completion of ARC 282, or instructor's approval.

#### **ARC 225CAP - Design Project II (5)**

Students will manage and design an intermediate architectural drafting project. Address regulatory codes, hypothetical client needs, establish schedules, and give effective progress reports. Students will use interactive collaboration within 3D Architectural CAD software and produce a complete set of computer-drafted construction drawings.

Prerequisite: Successful completion of ARC 223 and ARC 286, or instructor's approval.

#### **ARC 227 - Special Intern Project (5)**

Completion of a 150-hour job site internship as approved by the instructor and under employer supervision as stated in the Work-Based Learning Experience Plan and Agreement.

Prerequisite: Instructor's permission required.

#### **ARC 229 - Special Design Project (5)**

Complete a design project of student's choosing, as approved by the instructor to aid in realistic training.

Prerequisite: Successful completion of ARC 262 and ARC 286, or instructor's approval.

#### **ARC 231 - Cost Estimating I (3)**

Use industry software to estimate the cost of a single-story residential project as assigned by your instructor.

Prerequisite: Successful completion of ARC 223 or instructor's approval.

#### **ARC 255 - Employment Research (1)**

Basic job-seeking skill activities, including résumé preparation, employer contacts, presentation activities, and employment opportunities.

Prerequisite: ENG 091.

#### **ARC 262 - Intro to 3D Modeling (3)**

A hands-on introduction to 3D modeling. This course walks you through the basics of 3D software (i.e. SketchUp). Develop a preliminary design model using massing. Learn about strategies and techniques to develop speed and efficiency in modeling and presentations.

Prerequisite: Successful completion of ARC 183 or instructor's approval.

### **ARC 282 - Intro to Building Information Modeling (5)**

Use current industry standard architectural 3D software application to produce three-dimensional building models and production drawings. Explores integration of building systems in a three-dimensional virtual environment.

Prerequisite: Successful completion of ARC 262 or instructor's approval.

### **ARC 286 - Advanced Building Information Modeling (5)**

Using current industry standard architectural 3D software students will create software families. Manage both two-dimensional and three-dimensional information within the program family through use of parameters.

Prerequisite: Successful completion of ARC 282 or instructor's approval.

### **ARC 288CL - Applied CADD (5)**

Use a current industry standard 3D software application (Civil3D) to import GIS data as AutoCAD Civil 3D software and export AutoCAD Civil 3D objects to different GIS formats. Also, create Surfaces, Pipe networks from GIS data. In addition, learn how to access and work with GIS data and label objects with annotation templates.

Prerequisite: Successful completion of ARC 175 or instructor's approval.

### **ARC 293 - Engineering Statics (5)**

Students will apply basic engineering used in the building design field: equilibrium, loads and reactive forces, shear and bending in structures, and wood spanning elements.

Prerequisite: Successful completion of ARC 192 and MAT 099 or MAT 103 or higher, or instructor's approval.

## **ARCF - Automotive Restoration & Customization - Finishing**

### **ARCF 103 - Fundamentals & Shop Equipment (3)**

Covers shop safety, fundamentals of tool use, and proper use of shop equipment.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 109 - Welding & Metal Skills (4)**

Covers welding, heating, and cutting techniques using MIG and oxyacetylene equipment. Students will learn safe handling and correct metal-forming techniques of sheet metal.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 114 - Basic Repairs & Assembly (8)**

Covers basic repair and assembly procedures for bolt-on body components.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 119 - Custom Fabrication (6)**

Explores basic customizing techniques used on original factory parts, as well as fabrication of custom parts.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 124 - Refinishing Equipment (4)**

Explores refinishing equipment use and maintenance.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 129 - Refinish Preparation (7)**

Explores corrosion protection and vehicle refinish preparation.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 130 - Advanced Paint Application (4-6)**

Covers application of advanced masking, topcoat shading, and graphics on a restoration or custom project.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

### **ARCF 133 - Fiberglass/Composites Techniques (4-6)**

Further develop skills in customizing techniques used on original factory parts, as well as fabrication of custom

parts.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

#### **ARCF 134 - Custom Refinishing (6)**

Covers topcoat, clear coat, and custom refinishing.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

#### **ARCF 141 - Surface Imperfections/Show & Shine (4)**

Covers paint-application problem-solving and show detailing.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

#### **ARCF 154 - Automotive Restoration & Customization Finishing Lab (4-9)**

Finish projects and competencies in restoration and/or customizing. Nine credits in summer quarter; variable credit other three quarters.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

#### **ARCF 159 - Metal Straightening & Shaping (4-6)**

Metal straightening and shaping techniques on a custom or restoration project.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

#### **ARCF 167 - Custom Paint Application (3)**

Covers application of custom masking, topcoat shading and graphics.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

#### **ARCF 168 - Applied Metal Skills (3)**

Covers application of previously acquired metal skills as they relate to students' project work.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent.

Instructor's permission required.

#### **ARCF 170 - Custom Refinishing Special Projects (4-6)**

Develop skills in advanced custom and/or restoration techniques. Students will have the opportunity to apply knowledge to projects of personal interest, as assigned, and/or job shadowing.

Prerequisite: Students must have successfully completed the entire Automotive Collision Program or equivalent. Instructor's permission required.

## **ART - Art**

#### **ART& 100 - Art Appreciation (5)**

Introduction to the diversity of the art world from ancient civilizations to contemporary society. A discussion of art terminology and methods will be covered in an overview of art materials and techniques.

Prerequisite: Successful completion of ENG 094 or equivalent placement.

## **ASL - American Sign Language**

#### **ASL& 121 - American Sign Language I (5)**

Informs students about deafness, deaf culture, the deaf community, and American Sign Language. Learn to communicate both expressively and receptively in American Sign Language in basic conversation situations.

Prerequisite: None. Corequisite: None.

#### **ASL 122 - American Sign Language II (5)**

An expansion of ASL 121, working toward mastery of American Sign Language. Course focuses on deeper insights into vocabulary, grammar, receptive/expressive skills, and history with increased knowledge of deaf communities and culture.

Prerequisite: Successful completion of ASL 121 or appropriate prior ASL experience.

## **AUT - Automotive Technician**

#### **AUT 147 - Automotive Brakes (6)**

Theory and troubleshooting of hydraulic systems, disc brake systems, drum brake systems, power booster systems and antilock brake systems.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT



115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 149 and AUT 157.

**AUT 149 - Automotive Suspension, Steering, & Wheel Alignment (7)**

Theory and troubleshooting of front suspension systems, steering systems, rear suspension systems, and computer-controlled systems. This course will also cover basic wheel alignment, including two- and four-wheel alignment.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 147 and AUT 157.

**AUT 157 - Automotive Brakes, Suspension, Steering, & Wheel Alignment Lab (6)**

Repair automotive brakes, steering, and suspension systems by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Instructor's permission required.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: Concurrent enrollment in AUT 147 and AUT 149.

**AUT 174 - Engine Minor Mechanical Repair (6)**

Diagnose and repair general engine mechanical, lubrication, and cooling system problems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, and minor engine mechanical service and repair procedures.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: Concurrent enrollment in AUT 175 and 178 is required.

**AUT 175 - Engine Major Mechanical Repair (7)**

Diagnose and repair engine blocks, heads, and valve trains. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, and removal and installation procedures to successfully diagnose and repair automobiles and light truck engines.

Prerequisite: Must have required tools and textbooks. Instructor's permission required. Corequisite: Concurrent enrollment in AUT 174 and AUT 178 is required.

**AUT 178 - Engine Mechanical Lab (3)**

Repair engine components by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance and repair of automobile and light truck engines.

Prerequisite: Must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 174 and AUT 175.

**AUT 209 - Electronic Systems (7)**

Diagnose and repair automotive electronic systems and study basic application of computerized electronic control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles and light trucks.

Prerequisite: Must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 212.

**AUT 212 - Electrical Systems (9)**

Diagnose and repair automotive electrical systems and study basic application of computerized electronic control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles and light trucks.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required. Corequisite: AUT 209.

**AUT 217 - Automotive Ignition Systems (7)**

Diagnose and repair electronic and computer-controlled automotive ignition systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite: Must have required tools and textbooks. Successful completion of AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212. Instructor's permission required. Corequisite: AUT 223 and AUT 236.

**AUT 223 - Automotive Fuel Systems (7)**

Diagnose and repair fuel management systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite: Must successfully complete courses AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212, and must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 217 and AUT 236.

#### **AUT 236 - Automotive Emissions Systems (7)**

Diagnose and repair emissions control systems. Upon completion of this course, students will be familiar with the terminology, basic theory, and diagnostic and repair procedures used on automobiles and light trucks.

Prerequisite: Must successfully complete courses AUT 174, AUT 175, AUT 178, AUT 209, and AUT 212, and must have required tools and textbooks. Instructor's permission required. Corequisite: AUT 217 and AUT 223.

#### **AUT 239 - Automotive Clutches & Manual Transmissions (9)**

Provides students with the knowledge and skills to competently repair automotive clutches and manual transmissions/ transaxles. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck clutches and manual transmissions/transaxles.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **AUT 243 - Automotive Axles, Drivelines, Differentials & Transfer Cases (6)**

Provides students with the knowledge and skills to competently repair automotive axles, drivelines, differentials, and transfer cases. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck axles, drivelines, differentials, and transfer cases.

Prerequisite: Must successfully complete AUT 239 and have required tools and textbooks. Instructor's permission required.

#### **AUT 246 - Manual Drive Trains & Axles Lab (4)**

This course is designed to teach students to competently repair drive-train components by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance, and repair of automobile/light truck manual drive trains.

Prerequisite: Must successfully complete courses AUT 239 and AUT 243, and must have required tools and textbooks. Instructor's permission required.

#### **AUT 247 - Automatic Transmissions (7)**

This course provides students with the knowledge and skills to competently repair automatic transmissions. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile/light truck automatic transmissions.

Prerequisite: Must have required tools and textbooks. Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

#### **AUT 250 - Automatic Transaxles (7)**

This course provides students with the knowledge and skills to competently repair automatic transaxles. Upon completion of the course, students will be familiar with the terminology, basic theory, diagnostics, maintenance, and repair of automobile transaxles.

Prerequisite: Must successfully complete AUT 247 and have required tools and textbooks. Instructor's permission required.

#### **AUT 251CAP - Automatic Transmission/Transaxle Lab (4)**

This course is designed to teach students to competently repair automatic transmission/ transaxle assemblies by applying knowledge attained in required courses. This is a hands-on class that uses live projects. Upon completion of this course, students will be familiar with diagnosis, maintenance, and repair of automobile/light truck drive trains by applying academic knowledge to hands-on projects.

Prerequisite: Must successfully complete courses AUT 247 and 250, and must have required tools and textbooks prior to entering this course. Instructor's permission required.

#### **AUT 255 - Automotive Air Conditioning, Heating & Ventilation (6)**

Theory, troubleshooting, and repair of automotive air-conditioning systems, heating systems, and ventilation systems. Also covers recovery and recycling of both R-12 and R134A refrigerants.

Prerequisite: Must successfully complete AUT 209 and AUT 212 and have required tools and textbooks. Instructor's permission required.

### **AUT 270 - Introduction to Hybrid Safety (4)**

This course is an introduction to the safety precautions required when working on hybrid and electric vehicles. Students will learn about the basics of hybrid electrical systems, personal protective equipment (PPE), and how to power down the most common hybrid vehicles. Offered only during winter quarter.

Prerequisite: Successful completion of IAUT 104, IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Instructor's permission required.

### **AUT 295 - On-the-Job Training/Work-Based Learning (1-12)**

Provides advanced students with realistic training at a work site. Dates and times will be determined.

Prerequisite: Instructor's permission required.

## **AUTH - Automotive Technician**

### **AUTH 105 - Hybrid/Alternate Fuel Introduction & Safety (2)**

Covers the history, evolution, and general safety precautions for servicing.

Prerequisite: Students must have completed an ASE/NATEF certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 110 - Alternate Fuel Vehicle Systems (2)**

Covers diesel, E85, CNG, and hydrogen systems in use today.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 115 - Toyota Hybrid System Overview (2)**

Covers the Toyota systems in use today, with a focus on the Prius model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 120 - Toyota Prius Hybrid System (2)**

Covers the Toyota systems in use today, with a focus on the Prius model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 125 - Honda Hybrid System Overview (2)**

Covers the Honda hybrid systems in use today, with a focus on the Civic model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 130 - Honda Civic IMA Hybrid System (2)**

Covers the Honda Civic Integrated Motor Assist systems in use today.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 135 - Ford Escape/Mercury Mariner Hybrid System Overview (2)**

Covers the Ford Escape/Mercury Mariner Hybrid systems in use today, with a focus on the Escape model.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 140 - General Motors & Other Hybrid Systems Overview (2)**

Covers General Motors and other systems in use today, with a focus on the GM Dual Mode model system.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

### **AUTH 145 - Advanced Lab & Final Exam Preparation (2)**

Gives students a hands-on opportunity for preparation for the final exam.

Prerequisite: Students must have completed an ASE/NATEF-certified automotive training program or have instructor's permission with two years of automotive experience.

## AVIO-Avionics Technician

### AVIO 105 - Basic Electricity (6)

This course will introduce basic electronics theory along with understanding of both direct and alternating current. The fundamentals of Ohms and Kirchhoff's laws will be used to understand circuit measurements and calculations along with using measurement instruments for circuit component values.

Corequisite: AVIO 107, AVIO 110, and AVIO 115.

### AVIO 107 - Circuit Theory (6)

This course introduces basic circuit theory and describes how direct and alternating current operate within series, parallel and series-parallel circuits. Formulas, measurement techniques, and calculations will be used to create a greater understanding of given circuit dynamics.

Corequisite: AVIO 105, AVIO 110, and AVIO 115.

### AVIO 110 - Electrical components (6)

This course will introduce important discrete circuit components and diagnostic techniques. The items in this course are fundamental to many circuits. Examples of the components covered in this course are: resistors, Inductors, capacitors, transformers and switches.

Corequisite: AVIO 105, AVIO 107, and AVIO 115.

### AVIO 115 - Hazards and Safety (3)

Fundamentals of on-equipment safety practices, hazardous material handling and identification. General first aid, CPR, and treatment for electrical shock injuries are introduced and discussed during this course.

Corequisite: AVIO 105, AVIO 107, and AVIO 110.

### AVIO 120 - RF Circuits (8)

This course will give the student the knowledge necessary to recognize and identify frequency dependent circuits such as: filter supply circuits, frequency sensitive filtering circuits, and wave generating circuits. This course will also give the student the ability to accurately describe and compare power supply circuits/components.

Prerequisite: Successful completion of AVIO 105, AVIO 107, AVIO 110, and AVIO 115. Corequisite: AVIO 125, AVIO 130, and AVIO 135.

### AVIO 125 - Digital Logic (5)

This course will explore digital logic gates, functions, and

symbols. Students will analyze, define, and interpret digital logic circuits and compare hexadecimal, octal, and binary digital numbering systems.

Corequisite: AVIO 120, AVIO 130, and AVIO 135.

### AVIO 130 - Aircraft Maintenance Practices (5)

This course introduces common maintenance practices and fundamentals of on-equipment maintenance. Students will practice interpretation of schematic, pictorial, wiring, and block diagrams. Students will also use common tooling including screwdrivers, soldering irons, wire strippers, crimping tools, etc.

Prerequisite: none. Corequisite: AVIO 120, AVIO 125, and AVIO 135.

### AVIO 135 - Aircraft Handling and Testing (2)

Fundamental knowledge and practices involved in aircraft structures, terminology, aerodynamic forces, flight control surfaces, and ground handling procedures and safety. Use of circuit measuring equipment including multi-meters, oscilloscopes and milli-ohmmeters.

Corequisite: AVIO 120, AVIO 125, and AVIO 130.

## AVP - Professional Pilot

### AVP 105 - Private Pilot I (4)

Training in basic aircraft control, aircraft systems, airport procedures, and traffic pattern operations.

AVP 105 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,480	\$550
Solo	0	\$0	
Pre/Post	10	\$150	
Total		\$1,630	\$550

### Combined Total: \$2,180

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: FAA Class II Medical with Student Pilot Certificate prior to the first day of class. Instructor's permission only. Corequisite: AVP110 and AVP115.

### AVP 110 - Private Pilot II (4)

Covers aircraft control, establishing and maintaining

specific flight attitudes, and ground reference maneuvers.

AVP 110 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,480	\$550
Solo	.5	\$74	
Pre/Post	10.5	\$157.50	
<b>Total</b>		<b>\$1,711.50</b>	<b>\$550</b>

**Combined Total: \$2,261.50**

\*Aircraft costs are aligned with current fuel market prices.

Corequisite: AVP 105 and AVP 115.

**AVP 115 - Private Pilot III (4)**

Basic performance maneuvers, traffic pattern procedures, and takeoffs and landings. Upon successful completion, students will solo the aircraft.

AVP 115 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	7.5	\$1,110	\$412.50
Solo	2	\$296	
Pre/Post	9.5	\$142.50	
<b>Total</b>		<b>\$1,548.50</b>	<b>\$412.50</b>

**Combined Total: \$1,961**

\*Aircraft costs are aligned with current fuel market prices.

Corequisite: AVP 105 and AVP 110.

**AVP 118 - Private Pilot Practical Test Standards I (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Solo endorsement and completion of a solo flight. Instructor's permission only.

**AVP 125 - Private Pilot IV (4)**

Introduces knowledge, skills and aeronautical experience necessary to successfully complete the navigation and cross-country flight portion of flight training.

AVP 125 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	5.5	\$814	\$302.50
Solo	4.5	\$666	
Pre/Post	10	\$150	
<b>Total</b>		<b>\$1,630</b>	<b>\$302.50</b>

**Combined Total: \$1,932.20**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Grade of C or better in AVP 115 or equivalent. Pre-solo written exam must be completed with a passing grade. Instructor's permission only. Corequisite: AVP 130 and AVP 135.

**AVP 130 - Private Pilot V (4)**

Provides the knowledge, skill, and aeronautical experience necessary to read and understand disseminated weather reports and forecasts. Meets the requirements for cross-country navigation and basic instrument flight.

AVP 130 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	4	\$592	\$220
Solo	6	\$888	
Pre/Post	10	\$150	
<b>Total</b>		<b>\$1,630</b>	<b>\$220</b>

**Combined Total: \$1,850**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Pre-solo written exam must be completed with a passing grade. Instructor's permission only. Corequisite: AVP 125 and AVP 135.

**AVP 135CAP - Private Pilot VI (4)**

Gain the proficiency to meet the requirements necessary for FAA Private Pilot Certification with an Airplane Category and Single-Engine Class Rating.

AVP 135Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,480	\$550
Solo	0	\$0	
Pre/Post	10	\$150	
<b>Total</b>		<b>\$1,630</b>	<b>\$550</b>

**Combined Total: \$2,180**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Successful completion of AVP 130 or equivalent. Pre-solo written exam must be completed with a passing grade. Instructor's permission only.

**AVP 138 - Private Pilot Practical Test Standards II (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Solo endorsement and completion of a solo flight. Instructor's permission only.

**AVP 140 - Instrument Pilot I (4)**

Introduces skills that will establish a strong foundation in basic attitude instrument flying and basic instrument navigation.

AVP 140Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,480	\$550
Pre/Post	10	\$150	
<b>Total</b>		<b>\$1,630</b>	<b>\$550</b>

**Combined Total: \$2,180**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: FAA Private Pilot Certificate. Instructor's permission only. Corequisite: AVP 145 and AVP 150.

**AVP 145 - Instrument Pilot II (4)**

Perform precision attitude instrument flight, including advanced navigation techniques and procedures.

AVP 145Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	9	\$1,332	\$495
Pre/Post	9	\$135	
<b>Total</b>		<b>\$1,467</b>	<b>\$495</b>

**Combined Total: \$1,962**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 140 and AVP 150.

**AVP 150 - Instrument Pilot III (4)**

Apply advanced navigation techniques and perform holding pattern entry procedures.

AVP 150Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	11	\$1,628	\$605
Pre/Post	11	\$165	
<b>Total</b>		<b>\$1,793</b>	<b>\$605</b>

**Combined Total: \$2,398**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 140 and AVP 145.

**AVP 152 - Instrument Pilot Practical Standards III (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 155 - Instrument Pilot IV (4)**

Perform holding patterns and instrument approach procedures.

AVP 155Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10	\$1,480	\$550
Pre/Post	10	\$150	
<b>Total</b>		<b>\$1,630</b>	<b>\$550</b>

**Combined Total: \$2,180**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Grade of C or better in AVP 150 or equivalent. Instructor's permission only. Corequisite: AVP 160 and AVP 170.

**AVP 160 - Instrument Pilot V (4)**

Perform cross-country flight using advanced navigation procedures. Use ATC communication procedures and conduct instrument departures, arrivals, and approaches.

AVP 160Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	8	\$1,184	\$440
Pre/Post	8	\$120	
<b>Total</b>		<b>\$1,304</b>	<b>\$440</b>

**Combined Total: \$1,744**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 155 and AVP 170.

**AVP 170CAP - Instrument Pilot VI (4)**

Acquire the flight and aeronautical knowledge proficiency required for the issuance of the FAA Instrument-Airplane Rating.

AVP 170CAPFlight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	12	\$1,776	\$660
Pre/Post	12	\$180	
<b>Total</b>		<b>\$1,956</b>	<b>\$660</b>

**Combined Total: \$2,616**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 155 and AVP 160.

**AVP 172 - Instrument Pilot Practical Standards IV (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 175 - Commercial Pilot I (4)**

Acquire initial VFR cross-country flight training. Pilotage,

dead-reckoning, and radio navigation will be covered.

AVP 175Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	8	\$1,184	\$440
Solo	3	\$444	
Pre/Post	11	\$165	
<b>Total</b>		<b>\$1,793</b>	<b>\$440</b>

**Combined Total: \$2,233**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: FAA Private Pilot Certificate, Instrument-Airplane Rating. Instructor's permission only. Corequisite: AVP 180 and AVP 185.

**AVP 180 - Commercial Pilot II (4)**

Receive additional VFR cross-country flight training. Additional flight training will encompass mountain flying techniques and local night flight operations.

AVP 180Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	10.5	\$1,554	
Pre/Post	10.5	\$157.50	
<b>Total</b>		<b>\$1,711.50</b>	<b>\$0</b>

**Combined Total: \$1,711.50**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 175 and AVP 185.

**AVP 185 - Commercial Pilot III (4)**

Receive final training in VFR cross-country flight and night operations. The cross-country flight hours required for Commercial Pilot Certification will be completed.

AVP 185 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	8.5	\$1,285	
Pre/Post	8.5	\$127.50	
<b>Total</b>		<b>\$1,412.50</b>	<b>\$0</b>

**Combined Total: \$1,412.50**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 180 and AVP 185.

**AVP 190 - Airline Multi-Engine CRM (Crew Resource Management) I (3)**

Update your knowledge and skills in multi-engine and advanced avionics operations, systems, performance, instrument, and airline crew operations. Operate a multi-engine aircraft as a crew and log no less than 10 hours of multi-engine Pilot in Command time.

AVP 190 Flight Training	Flight Hours	Aircraft*	Dual
Twin Aircraft	12 (approx.)	\$4,182.36	\$660
Pre/Post	12 (approx.)	\$180	\$0
<b>Total</b>		<b>\$4,362.36</b>	<b>\$660</b>

**Combined Total: \$5,022.36**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA Commercial multi-engine Certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. Must have instructor's permission.

**AVP 195 - Airline Multi-Engine CRM (Crew Resource Management) II (3)**

Update your knowledge and skills in multi-engine and advanced avionics operations, systems, performance, instrument, and airline crew operations. Operate a multi-engine aircraft as a crew and log no less than 20 hours of multi-engine Pilot in Command time.

AVP 195 Flight Training	Flight Hours	Aircraft*	Dual
Twin Aircraft	12 (approx.)	\$4182.36	\$660
Pre/Post	12 (approx.)	\$180	\$0
<b>Total</b>		<b>\$4,362.36</b>	<b>\$660</b>

**Combined Total: \$5,022.36**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA Commercial multi-engine Certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. Must have instructor's permission.

**AVP 210 - Commercial Pilot IV (4)**

Receive initial flight and ground training in high-performance Commercial Pilot Certification maneuvers. Flight maneuver training includes chandelles, lazy eights, steep power turns, and accuracy landings.

AVP 210 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	11	\$1,628	
Pre/Post	11	\$165	
<b>Total</b>		<b>\$1,793</b>	<b>\$0</b>

**Combined Total: \$1,793**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Grade of C or better in AVP 185 or equivalent. Instructor's permission only. Corequisite: AVP 215 and AVP 220.

**AVP 215 - Commercial Pilot V (4)**

Gain additional aeronautical knowledge and flying skills necessary for advanced precision flight maneuvers.



AVP 215 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	3	\$444	\$165
Solo	7	\$1,036	
Pre/Post	10	\$150	
Total		\$1,630	\$165

**Combined Total: \$1,795**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 210 and AVP 220.

**AVP 218 - Multi-Engine Instructor Certification MEI (3)**

Obtain and/or update knowledge and skills to meet Federal Aviation Administration multi-engine instructor requirements. Multi-engine operations, systems, performance, instrument, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision making, and instrument flight, will be studied.

AVP218 Flight Training	Flight Hours	Aircraft*	Dual
Twin Aircraft	10 (approx.)	\$3,485.30	\$550
Pre/Post	10 (approx.)	\$150.00	\$0
Total		\$3,635.30	\$550

**Combined Total: \$4,185.30**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA private pilot certificate. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training. Must have instructor's permission.

**AVP 220 - Commercial Pilot VI (4)**

Receive advanced training in all the required Commercial Pilot Certification maneuvers. Flying proficiency in these maneuvers will meet the requirements set forth in the FAA Practical Test Standards.

AVP 220 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	5	\$740	\$275
Solo	4	\$592	
Pre/Post	9	\$135	
Total		\$1,467	\$275

**Combined Total: \$1,742**

\*Aircraft costs are aligned with current fuel market prices.

Corequisite: AVP 215 and AVP 210.

**AVP 223 - Commercial Pilot Practical Standards V (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only. Prerequisites listed on Course Outline.

**AVP 230 - Commercial Pilot VII (4)**

Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Basic flight maneuvers and aircraft systems will be covered.

AVP 230 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	4.5	\$666	\$247.50
Solo	5	\$740	
Pre/Post	9.5	\$142.50	
Total		\$1,548.50	\$247.50

**Combined Total: \$1,796**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Grade of C or better in AVP 220 or equivalent. Instructor's permission only. Corequisite: AVP 235 and AVP 240.

**AVP 235 - Commercial Pilot VIII (4)**

Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Advanced flight maneuvers, as well as emergency procedures, will be mastered.

AVP 235 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	6.5	\$962	\$357.50
Solo	4	\$592	
Pre/Post	10.5	\$157.50	
<b>Total</b>		\$1,711.50	\$357.50

**Combined Total: \$2,069**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 230 and AVP 240.

**AVP 240 - Commercial Pilot IX (4)**

Operate a high-performance aircraft with retractable landing gear and constant-speed propeller. Increase proficiency in advanced flight maneuvers and emergency procedures. Obtain logbook endorsement for the operation of High Performance Airplanes.

AVP 240 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	4	\$592	\$220
Solo	6	\$888	
Pre/Post	10	\$150	
<b>Total</b>		\$1,630	\$220

**Combined Total: \$1,850**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 230 and AVP 235.

**AVP 245 - Commercial Pilot X (4)**

Receive initial preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

Basic performance maneuvers, traffic pattern procedures, and takeoffs and landings. Upon successful completion, students will solo the aircraft.

AVP 245 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	4	\$592	\$220
Solo	6	\$888	
Pre/Post	10	\$150	
<b>Total</b>		\$1,630	\$220

**Combined Total: \$1,850**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Grade of C or better in AVP 240 or equivalent. Instructor's permission only. Corequisite: AVP 250 and AVP 255.

**AVP 250 - Commercial Pilot XI (4)**

Receive additional preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

AVP 250 Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	2	\$296	\$110
Solo	0	\$0	
Dual Complex Aircraft	8	\$1,897.44	\$440
Pre/Post	10	\$150	
<b>Total</b>		\$2,343.44	\$550

**Combined Total: \$2,893.44**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 245 and AVP 255.

**AVP 255CAP - Commercial Pilot XII (4)**

Receive final advanced preparative training to increase aeronautical skills and experience to meet the requirements for the issuance of a Commercial Pilot Certificate.

AVP 255CAPFlight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	0	\$0	\$0
Solo	0	\$0	
Dual Complex Aircraft	10	\$2,371.80	\$550
Pre/Post	10	\$150	
Total		\$2,521.80	\$550

**Combined Total: \$3,071.80**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Instructor's permission only. Corequisite: AVP 245 and AVP 250.

**AVP 257 - Commercial Pilot Practical Standards VI (4)**

Receive additional flight and ground training as required to meet pilot certification requirements.

Prerequisite: Instructor's permission only.

**AVP 260 - Certified Flight Instructor I (4)**

Receive initial training in teaching and learning theory, as well as overall review of commercial pilot aeronautical knowledge subject areas. Student will be trained to fly the aircraft from the right seat to Commercial Pilot Practical Test Standards.

AVP260Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10 (approx.)	\$1,480	\$550
Pre/Post	10 (approx.)	\$150	\$0
Total		\$1,630	\$550

**Combined Total: \$2,180**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: FAA Commercial Pilot, Airplane Certificate and Instrument Airplane Rating. Instructor's permission only.

**AVP 265 - Certified Flight Instructor II (4)**

Master proper teaching techniques from the right seat of the training aircraft. Develop proficiency in conducting aeronautical knowledge briefings. Successful completion will result when knowledge and proficiency meet and/or exceed FAA Practical Test Standards.

AVP265Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10 (approx.)	\$1,480	\$550
Pre/Post	10 (approx.)	\$150	\$0
Total		\$1,630	\$550

**Combined Total: \$2,180**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Successful completion of AVP 260 or equivalent. Instructor's permission only.

**AVP 268 - Certified Instrument Flight Instructor (4)**

Acquire the aeronautical knowledge, skills, and experience necessary to obtain an FAA Instrument Flight Instructor Rating added to student's Certified Flight Instructor Certificate.

AVP268Flight Training	Flight Hours	Aircraft*	Dual
Non-Complex Aircraft	10 (approx.)	\$1,480	\$550
Pre/Post	10 (approx.)	\$150	\$0
Total		\$1,630	\$550

**Combined Total: \$2,180**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: FAA Commercial Pilot Airplane Certificate with Instrument Airplane Rating Certified Flight Instructor-Airplane Certificate. Instructor's permission only.

**AVP 271 - Multi-Engine Certification (3)**

Obtain and/or update their knowledge and skills to meet Federal Aviation Administration multi-engine requirements. Multi-engine operations, systems, performance, instrument, and aerodynamics will be examined. Emergency operations, including engine-out performance, aerodynamics, decision making, and instrument flight will be studied.

AVP271Flight Training	Flight Hours	Aircraft*	Dual
Twin Aircraft	12 (approx.)	\$4,182.36	\$660
Pre/Post	12 (approx.)	\$180	\$0
Total		\$4,362.36	\$660

**Combined Total: \$5,022.36**

\*Aircraft costs are aligned with current fuel market prices.

Prerequisite: Must be at least 18 years of age and be able to read, speak, write, and understand the English language. Must comply with FAA licensing standards and possess an FAA private pilot certificate and Instrument rating. Second-class FAA medical certificate required prior to the first day of class. Please contact instructor for details. The Transportation Security Administration (TSA) requires that U.S. citizens prove citizenship status before beginning flight training by providing a current passport or birth certificate and driver's license. Non-U.S. citizen students must submit to a background and fingerprint check from the TSA prior to beginning training. Must have instructor's permission.

## BAKE - Pastry Arts

### BAKE 106 - Chocolate I (Confections) (4)

Explores the different types of chocolate used in making assorted treats, candies, and garnishes. Various methods of tempering, chocolate decorating, fudges, truffles, and other candies will be identified.

### BAKE 109 - Patisserie I (5)

Provides students with the opportunity to attain fundamental baking, time management, and production competencies in the program run bistro. These include scones, muffins, cookies and cake; demonstrating how to read, write and follow a standard recipe; and understanding the basic principles of various baking methods. Students will uphold a high level of professionalism.

Prerequisite: None.

### BAKE 114 - Dessert Alternatives (Sugar Free, Gluten Free) (3)

Covers how to make sugar-free, vegan, and gluten-free desserts. Students will explore how to develop and use special ingredients, techniques, and methods when making desserts not using standard ingredients, such as eggs, butter, white flour, and milk.

### BAKE 116 - Patisserie II (5)

Provides students with the opportunity to refine fundamental baking, time management, and production competencies in the program run bistro. These include scones, muffins, cookies and cake; demonstrating how to read, write and follow a standard recipe; and understanding the basic principles of various cooking methods. Students will uphold a high level of professionalism.

Prerequisite: BAKE 109: Patisserie I.

### BAKE 117 - Frozen Desserts (3)

Explores the world of frozen desserts. Students will develop recipes for various frozen desserts, such as gelato, sorbets, parfaits, and ice creams, along with savory desserts with the use of herbs, spices, and vegetables.

### BAKE 118 - Cakes (4)

Introduces students to the mixing methods, their ingredients and function in cake baking. Correct scaling, portioning, baking and determining doneness of assorted cakes. Filings and icings will be introduced in the presentation of basic cakes.

Prerequisite: None.

### BAKE 119 - Yeast Breads (4)

Introduces students to the techniques used with starters and yeasts. Students will demonstrate how to cultivate yeast with proper proofing and baking techniques, along with completing a variety of yeast breads.

### BAKE 122 - Patisserie III (5)

Introduces students to the experience of managing, training, and mentoring fellow classmates. Provides students with the opportunity to further refine fundamental cooking, time management, and production competencies in the program run bistro. These include scones, muffins, cookies and cake; demonstrating how to read, write and follow a standard recipe; and understanding the basic principles of various cooking methods. Students will uphold a high level of professionalism.

Prerequisite: BAKE 109 Patisserie I and BAKE 116 Patisserie II.

### BAKE 131 - Pies, Tarts, Custards and Fillings (4)

Introduces students to a variety of pie crusts and the preparation of assorted fruit fillings. Tarts, custards, and pastry cream will also be explored.

### **BAKE 134 - Quick Breads, Cookies, Brownies (3)**

Introduces students to the ingredients and function in preparation of quick breads and cookies. Students will explore the assorted doughs, shapes, and baking and finishing methods.

### **BAKE 140 - Restaurant (Individual) Desserts and Petit Fours (5)**

Introduces students to the challenges of creating individual desserts for restaurants. Students will make individual desserts for the college restaurant and learn the detailed art of the Petit Fours.

### **BAKE 153 - Sugar Work (3)**

Introduces students to the stages of sugar work. Students will demonstrate how to make various sugar-based candies and pulled sugar items. The coloring and handling of sugar flowers and ribbons will also be demonstrated.

### **BAKE 157 - Wedding Cakes (3)**

Covers elaborate techniques used in the composition, design, and execution of wedding cakes. Explores the use of gum paste, fondant, and modeling chocolate. Students will develop a cake rendering on the spot with a customer.

### **BAKE 163 - Retail and Customer Service (5)**

Familiarizes students with all aspects of retail service, cashiering and retail displays. Included are opening/closing procedures, retail layout and presentation, customer service, leadership, sanitation and safety, proper cash handling, and sales techniques.

Prerequisite: None.

### **BAKE 165 - Kitchen and Bistro Management (3)**

Prepares students to be responsible for specific operational procedures involved in running a kitchen and retail bakery counter. Students also learn how to communicate with, lead, and manage different types of people. This includes receiving and storage of product, invoicing, inventory management, position planning, crew hiring and evaluations for all kitchen positions.

Prerequisite: BAKE 163 Retail and Customer Service.

## **BIOL - Biology**

### **BIOL& 160 - General Biology w/Lab (5)**

Provides an introduction to cellular biology for students preparing for the health professions. Major concepts include the structure, reproduction, and metabolism of

cells; genetics; ecological perspectives; and evolutionary biology.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **BIOL& 175 - Human Biology w/Lab (5)**

This course is an in-depth approach to body systems, emphasizing the relationship between structure and functions. This is a laboratory course appropriate for non-science majors or for students beginning study in life sciences.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **BIOL& 241 - Human A & P I (5)**

Provides students with the first course of the two-quarter study of body structure and related physiology on cellular-through-system levels. Includes an in-depth study of cells, tissues, and integumentary, skeletal, muscular, nervous, and sensory systems. Laboratory component included.

Prerequisite: Successful completion of CHEM& 110 or higher and BIOL& 160 or BIOL& 175. All prerequisite courses must be completed with a grade of 2.0 or better.

### **BIOL& 242 - Human A & P II (5)**

Provides students with the second course of the two-quarter study of body structure and related physiology on cellular-through-system levels. Includes an in-depth study of body organization and cardiovascular and lymphatic physiological processes. Includes immunology, respiratory, digestive, metabolic, excretory, reproductive, and endocrine systems. Laboratory component included.

Prerequisite: Successful completion of BIOL& 241 with a grade of 2.0 or better.

### **BIOL& 260 - Microbiology (5)**

Provides students with the content of diversity, structure, and physiology of beneficial and harmful microbes. Laboratory practice in identification of microbial species through culturing, staining, and biochemical testing. Includes laboratory.

Prerequisite: Successful completion of BIOL& 160 with a grade of 2.0 or better and CHEM& 110 or higher with a grade of 2.0 or better. Corequisite: None.

## BUS - Business

### **BUS& 201 - Business Law (5)**

Introduces students to business law as it applies to the business world through the Uniform Commercial Code. Examines legal institutions and processes, legal reasoning, and the interaction of law and business. Laws pertaining to business contracts, sales, bailments, commercial paper, employment, agency, business organization, insurance, and property are reviewed.

Prerequisite: Successful completion of ACTG 115 or instructor's approval.

### **BUS 310 - Project Management (5)**

Coordination of projects involving multiple tasks and resources, and the resolution of the conflicts that arise is a critical skill in business. This course teaches students some of the techniques necessary to develop realistic and comprehensive project plans; identify risk areas; monitor the plans; and deal with problems. The course will also cover management of the procurement process, and communication with project stakeholders. The course includes the use of Microsoft Project to develop and manage project plans.

Prerequisite: Successful completion of ENGL& 101.  
Corequisite: None.

## CAH - Core Allied Health

### **CAH 102 - Medical Terminology I (5)**

Provides students with the basic techniques of medical word building using basic word elements. The class will be organized according to specific body systems and will include key terms and the introduction of anatomical, physiological, and pathological terms.

### **CAH 105CL - Computer Applications (5)**

Introduction course to the use of Microsoft Office and related online programs. Students will become familiar with online tools and learn team-based projects while developing a proficiency in the use of technology.

Prerequisite: None.

### **CAH 110 - Introduction to Medical Laboratory Technology (2)**

Provides an overview of the profession of Medical Laboratory Technology which includes an introduction to

laboratory accreditation and certification, types of laboratory personnel, medical, ethical and legal issues, laboratory safety, laboratory math, use and care of the microscope, a description of the major laboratory departments, common laboratory tests and quality control and quality assurance.

Prerequisite: None. Corequisite: None.

## CAS - Computer Applications

### **CAS 105 - Keyboarding (3)**

Use computers to develop touch control and proper keyboarding techniques; introduction to basic word-processing functions.

### **CAS 115CL - Introduction to Computing (3)**

Explore personal computer concepts from a user's perspective. In this introductory course, learn computer terminology; run programs; save, retrieve, and search for files; use help; and perform computer maintenance. Develop basic skills in word processing, Internet, email, and PowerPoint.

### **CAS 121CL - Word I (3)**

Use beginning word-processing techniques while creating and editing business documents. Create tables, columns, envelopes, and mailing labels. Work with special features to track and review changes and compare documents.

### **CAS 125CL - Word II (3)**

Explore advanced word processing with Microsoft Word. Perform mail merges, create styles, use advanced graphics tools, create basic forms with formulas, and use advanced report functions, including indexes. Create macros and modify the Word environment.

Prerequisite: Successful completion of CAS 121.

### **CAS 130CL - Excel I (3)**

Create and analyze professionally formatted spreadsheets. Enter data, formulas, and functions. Create charts and insert graphics. Sort and filter lists.

Prerequisite: MAT 092 skills preferred.

### **CAS 135CL - Excel II (3)**

Use advanced spreadsheet features and functions to analyze and project data. Learn how to use what-if analysis tools, such as scenarios and solver. Create macros; validate data; link worksheets/books; use pivot tables; find errors; and share, merge, and protect workbooks.

Prerequisite: Successful completion of CAS 130.

### **CAS 141CL - PowerPoint (3)**

Create professionally formatted presentations that include animation and transitions. Insert and format charts, graphics, diagrams and pictures. Save presentations for various delivery options. Working knowledge of computer literacy to include file management, cloud storage, browsers, and search engines recommended.

Prerequisite: None. Corequisite: None.

### **CAS 145CL - Publisher (5)**

Explore desktop publishing in this project-based class. Create and edit flyers, newsletters, brochures, logos, calendars, and various business publications. Use mail merge to create letters and labels. Use tools to edit text, colors, graphic-design objects, and logos. Prepare files for commercial printing.

Prerequisite: Successful completion of CAS 115 or CAS 121, or instructor permission.

### **CAS 151CL - Access I (3)**

Develop basic relational databases as you create, edit, format, and print tables, queries, forms, and reports. Copy records and import tables from another Access database. Define field properties and create relationships. Run, sort, and filter queries. Use comparison and logical operators and perform calculations. Explore the basics of creating a cohesive database.

Prerequisite: Successful completion of CAH 105, CAS 115, or CAS 121, or instructor permission.

## **CHEM - Chemistry**

### **CHEM& 110 - Chemical Concepts w/Lab (5)**

An introduction to chemistry intended for non-science majors. This course looks at how models of atoms, bonding, and the structures of materials provide an understanding of common chemical properties and reactions.

Prerequisite: MAT 094 or equivalent placement, or MAT 108, or MATH& 146.

### **CHEM& 121 - Intro to Chemistry (5)**

Understanding the metric system, atomic theory, bonding, quantitative relationships, solutions, gases, acids and bases, salts, and nuclear chemistry. Lab included.

Prerequisite: MAT 094 or equivalent placement, or MAT 108, or MATH& 146. Corequisite: NONE.

### **CHEM& 131 - Introduction to Organic/Biochemistry (5)**

This course is a survey of organic and biochemistry. The following topics are covered: Nomenclature of organic matter, alcohols, alkenes, organic acids and bases, amines and amides, carbohydrates, proteins, enzymes, nucleic acids, and metabolic pathways.

Prerequisite: Successful completion of CHEM& 121.

### **CHEM& 161 - General Chemistry with Lab I (5)**

Course covers methods and measurements, including significant figures and scientific notation, states of matter, atomic structure, the periodic table, ionic and covalent bonding, and calculations and chemical equations, including the mole.

Prerequisite: Successful completion of MATH& 141 and one year of high school chemistry or CHEM& 121 or other college-level chemistry class.

### **CHEM& 162 - General Chemistry with Lab II (5)**

A continuation of general chemistry with instruction in properties of solutions, calculation of solution concentrations, thermodynamics, acids and bases, oxidation and reduction, and radioactivity. Also covers the structure, properties, and nomenclature of organic molecules.

Prerequisite: Successful completion of CHEM& 161 or acceptable equivalent.

## **CMST - Communication**

### **CMST& 220 - Public Speaking (5)**

An Open Course Library class with inexpensive course materials. Assists students in developing real-world oral communication skills. Capture the dynamics of today's business realities and see the benefits of effective communication. Selection of topics, library research, analysis, oral style, use of visual aids, and preparation and delivery of various types of speeches and oral presentations are included. The Internet, email, community interaction, and other practical tools support student learning and increase public speaking skills. Emphasis is placed on principles of cultural diversity.

Prerequisite: Successful completion of ENG 094 or equivalent placement.

## COLL - College Success

### COLL 102 - College Success for All (3)

College Success for All prepares students for a successful transition to college. It is designed to provide students with the basic skills to be successful in college including resources and college tools, financial success, academic success, social success, and career success. All students should take the course in their 1st quarter of attendance.

Prerequisite: None. Corequisite: None.

## CONST - Construction Technologies

### CONST 102 - Safety & Operating Certificates (3)

Presents the basic elements of safe practices related to construction job sites, emphasizing accident prevention and correct response in the event of injury and other medical emergencies on the job, as well as personal protective equipment that is standard in the industry. Participants receive instruction in administering First Aid, CPR and AED (defibrillator use), as well as how to protect themselves against Bloodborne Pathogens (BBP). Provides Forklift Operator Certification with classroom and hands-on training in safe forklift operation; Lead Renovation, Repair and Painting certification (Lead RRP- required by EPA to engage in remodeling certain types of older structures), OSHA 10 Construction Safety card, and American Heart Association First Aid and CPR certification card.

Prerequisite: Physical capability to do the work required.

### CONST 104 - Trades Math & Print Reading for Const. (5)

Provides a basic foundation of math skills directly related to performing functions required in the construction trades, along with essential knowledge required to accurately read and interpret blueprints, plans, and schematics. Math skills and the ability to correctly interpret plans/prints are critically important to the construction process to ensure jobs are completed professionally and on time. This foundational training includes, but is not limited to, ability to measure and cut various materials correctly, understand and use the metric system of measurement, solve questions related to weight, volume, pressure, angles of fall, etc., and understand scale" and its relationship to the finished product."

### CONST 106 - Basic Carpentry Skills (6)

Introduces basic tools of the trades with a focus on carpentry and provides hands-on experience in the proper techniques for safe use of various hand and power tools as well as their correct care, maintenance and storage. Participants will learn how to set up an efficient work station, how various parts of a structure are framed up, and the basic principles of electric power and how that relates to employing proper electrical connections when using power tools. Students will be drilled on essential hands-on skills needed to pass entry assessments for the United Brotherhood of Carpenters carpentry apprenticeship program.

### CONST 109 - Employment Preparation (4)

Explains the history of apprenticeship, its subsequent evolution into the present-day form, and how this translates into an effective method of on-the-job training resulting in journeyman credentials that are recognized industry wide throughout this country and in many other parts of the world. Provides an overview of government agencies, regulatory bodies and actual regulations that affect the construction industry. Participants are also given information related to job success, including but not limited to, ethical standards, attitude and behavioral expectations, teamwork and communication strategies, personal financial management, ergonomics, physical fitness and nutrition, and use of basic MS Office computer programs to conduct job search activities.

### CONST 112 - Footings & Foundations (3)

Introduction to the methods of construction footing and foundation forms, terminology, and inspections for the typical residential home.

### CONST 113 - Introduction to Plumbing (5)

Covers the awareness of using personal protective equipment, how to work safely in the plumbing field, understanding of excavating and trenching, and the ability to recognize hazardous materials.

Prerequisite: Successful completion of CONST 102, 104, 106 and 144. Corequisite: None. Crosslisted as: None.

### CONST 115 - Safety and Circuit Design: Materials and Requirements in Residential Electrical Systems (5)

Covers the design and implementation of safe, efficient residential electrical systems. It delves into residential circuits, materials used in electrical systems, safety standards, regulations, and practical applications. The course prepares students for careers in residential



electricity, home construction, and related fields.

Prerequisite: Successful completion of CONST 102, 104, 106 and 144. Corequisite: None.

**CONST 116 - Floor Framing (3)**

Introduction to the construction procedures and terminology used in framing a residential wood floor.

**CONST 118 - Diagrams and Blue Prints (5)**

Covers plumbing blueprints/plans for buildings, including specifications, dimensions, symbols, and layouts. Students will practice sketching piping installations, showing water supply and drain, waste and vent (DWV).

Prerequisite: Successful completion of CONST 102, 104, 106 and 144. Corequisite: None. Crosslisted as: None.

**CONST 120 - Wall Framing, Sheeting & Ceilings (5)**

Introduction to wall-framing construction procedures and terminology, the application of ceiling and/or two-story framing, inspections, sheeting, and aligning.

**CONST 122 - Roof Framing (5)**

Introduction to roof framing and the use of a framing square, including both truss roofs and stick-built residential roofs.

**CONST 124 - Principles of Residential Electrical Rough-In (5)**

Covers key aspects of electrical installation, including wire pulling, hole drilling, box installation, and cable sizing. It emphasizes NEC standards and collaboration with other tradespeople, preparing students for residential electrical projects.

Prerequisite: Successful completion of CONST 102, 104, 106 and 144. Corequisite: None.

**CONST 126 - Roofing Materials & Installation (3)**

Introduction to various roofing materials, including proper installation techniques.

Prerequisite: Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

**CONST 131 - Residential Electrical Design: Load Calculations and Applications (5)**

Covers load calculations, circuit design, grounding, bonding, overcurrent protection, and equipment installation. The course emphasizes practical applications and problem-solving, preparing students for various

residential electrical projects.

Prerequisite: Successful completion of CONST 102, 104, 106, and 144. Corequisite: None.

**CONST 132 - Plumbing Pipes and Fixtures (5)**

Covers the pipes and fixtures, with regard to the materials, types, as well as the differences in toilet, sink, tub and shower types. Students will practice installation and repairing on the pipes and fixtures.

Prerequisite: Successful completion of CONST 102, 104, 106 and 144. Corequisite: None.

**CONST 134 - Exterior Finish (3)**

Introduction to the installation of exterior trim, siding, window, and door installation, or the equivalent on typical residential homes.

Prerequisite: Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

**CONST 139 - Interior Finish I (5)**

Introduction to interior wall and ceiling finish, interior doors and hardware, cabinet and countertop installation, and interior trim and finish flooring.

Prerequisite: Instructor's permission.

**CONST 142 - Interior Finish II (3)**

Continuation of interior wall and ceiling finish, interior doors and hardware, cabinet and countertop installation, and interior trim and finish flooring.

Prerequisite: Successful completion of CONST 102, CONST 104, CONST 106, and CONST 109.

**CONST 144 - Electrical and Plumbing Basics (4)**

Introduction to basic home electrical, switches, outlets, wiring, and plumbing pipes, drains, faucets and leaks.

Prerequisite: Instructor's permission.

**CONST 147 - Drains and Vents (5)**

Covers types of air vents for sewers, drains, grey water and waste water disposal. Students will practice installing and repairing air vents and drains in buildings.

Prerequisite: Successful completion of CONST113, CONST118 and CONST132. Corequisite: None.

Crosslisted as: None.

**CONST 151 - NEC Proficiency: Comprehensive Guide to National Electrical Code (5)**

Covers residential installation standards, grounding and bonding requirements, conductor sizing, overcurrent protection, wiring methods, and equipment installation. The course prepares electricians to apply the NEC to their work, ensuring safety and compliance.

Prerequisite: CONST 102, 104, 106 and 144.

**CONST 152 - LEED (2)**

Introduction to LEED for new construction and renovations.

Prerequisite: Instructor's permission.

**CONST 155 - Decking (2)**

Introduction to outside deck construction, including types, code requirements, and safety.

Prerequisite: Instructor's permission.

**CONST 158 - Energy Auditor (5)**

Introduction to trade regulations, other building trades workers, industry and standards organization, and entering the carpentry trade.

Prerequisite: Instructor's permission.

**CONST 160 - Home Inspector (4)**

Overview of equipment, technology, systems, and software used to measure a building's structural and physical integrity.

Prerequisite: Instructor's permission.

**CONST 165 - Trim-Out Procedures in Residential Electrical Systems (5)**

Covers trim-out procedures in residential electrical systems, covering the installation of various components like circuit breakers, lighting fixtures, and switches. It emphasizes hands-on sessions for mastering installation tasks and service panel trim-outs. The course prepares students for a career as a residential electrician.

Prerequisite: Successful completion of CONST 151, 203, and 207.

**CONST 201 - Septic Tanks and Sewer Lines (5)**

Covers the construction and operation of city sewer system and private septic tanks, operation of materials and methods used in the drain field, and proper layouts.

Prerequisite: Successful completion of CONST113, CONST118 and CONST132.

**CONST 203 - Residential Electrical Diagnostics: A Course on Troubleshooting (5)**

Covers components of electrical systems, use of diagnostic tools, and safety procedures. The course emphasizes hands-on learning and practical exercises, preparing students to resolve a wide range of electrical issues.

Prerequisite: CONST 115, 124, and 131.

**CONST 205 - Water Pipes and Water Heaters (5)**

Covers the proper procedures of installing and repairing fresh water pipes to appliances and water heaters.

Prerequisite: Successful completion of CONST113, CONST118 and CONST132. Corequisite: None. Crosslisted as: None.

**CONST 207 - Residential Renewable Energy: Solar Power, Battery Backup, and EV Charging (5)**

Covers the design, installation, maintenance, and trouble shooting of residential solar power systems, battery backup solutions, and electrical vehicle (EV) charging infrastructure, with a focus on residential applications.

Prerequisite: Successful completion of CONST 115, 124 and 131.

**CONST 208 - Whirlpool Bath and Toilets (5)**

Covers the installation of tub, shower, and whirlpool tubs. Students will also check for and repair any/or leaks in the installation.

Prerequisite: Successful completion of CONST 147, 201, and 205. Corequisite: None. Crosslisted as: None.

**CONST 211 - Natural Gas Piping (5)**

Covers the procedures and codes of joining materials of the pipes, including black iron and galvanized iron, and connecting them to the gas appliances.

Prerequisite: Successful completion of CONST 147, 201, and 205. Corequisite: None.

**CONST 213 - Electrical Service Installation: Principles and Practice (5)**

Covers key components like service meters, electrodes, and disconnecting means. The course prepares students for installation and maintenance tasks, ensuring safety and regulatory compliance.

Prerequisite: Successful completion of CONST 151, 203, and 207.

### **CONST 215 - Pools and Hot Tubs (5)**

Covers the components, construction, installation of swimming pools, hot tubs, and spas. Students will create on a model system for plumbing/drains and filtration.

Prerequisite: Successful completion of CONST 147, 201, and 205. Corequisite: None.

### **CONST 217 - Grounding and Bonding: From Theory to Practice (5)**

Covers grounding and bonding principles, theory, dispels misconceptions, and teaches practical applications for designing, installing, and maintaining electrical grounding systems, preparing students for real-world settings in the electrical industry.

Prerequisite: Successful completion of CONST 151, 203, and 207.

## **COSMO - Cosmetology**

### **COSMO 112 - Infection Control Principles & Practices (2)**

Acquire knowledge for successful and responsible infection control, first aid and safety. It is the foundational practices and procedures commonly used in all aspects of your education and future salon pursuits. Topics include proper cleaning and disinfecting tools and work areas for compliance with state regulations and laws. Understanding infection control principles and practices will help protect hair designers and their clients from the unnecessary spread of infectious diseases and maintain a safe, efficient working environment.

Prerequisite: N/A.

### **COSMO 117 - Trichology (4)**

Learn why professional hair services must be based on an understanding of the growth, structure, and composition of hair. Gain skills in evaluating various hair and scalp conditions, disorders and diseases including parasites. Develop techniques for draping, shampooing, conditioning treatments and scalp massage as the fundamentals for attentive and skillful client care services. Learn how to recommend clients seek medical attention if unfavorable conditions exist.

Prerequisite: N/A.

### **COSMO 137 - Application of Haircutting, Hairstyling, and Thermal Styling (13)**

Introducing haircutting tools and cutting fundamentals. The use of a systematic plan for each haircut develops the foundational skills desired. It is important the Hair Designer recognize and identify the primary considerations, fundamentals, essentials and infection control and safety. Learn the consultation guidelines for haircutting to create the client's desired results. Build a repertoire of skills necessary to meet the needs in industry.

Thermal Styling covers the proper usage and methods of styling, waving or curling the hair with heated tools. Haircutting and Thermal Styling are stand-alone services. The practice of infection control and safety practices required by salon standards and state board regulations are reinforced.

Prerequisite: N/A.

### **COSMO 146 - Chemical Texture Services (5)**

Presentation of the three main concepts of chemical texturizing commonly known as permanent waving, relaxing with chemicals, and curl reforming and straightening. Brazilian blowout certification is achievable through this course. This course covers the theory of chemical texturizing and the tools used to achieve desired effects, infection control principles and practices, and client consultation.

Prerequisite: Successful completion of COSMO 163, COSMO 181, and COSMO 226 or instructor approval.

### **COSMO 147 - Wet Styling and Long Hair Design (5)**

A presentation of techniques, procedures and fundamentals in wet styling. The student will be introduced to finger waving, pin curling and roller placements along with long hair design techniques. Infection control principles and practices are reinforced.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137 with a "C" grade or better or instructor's approval.

### **COSMO 159 - Lab Clinic I (7)**

Enhancing skills and knowledge by providing services to client, models and on the use of mannequins in a realistic salon environment. This course reinforces skills learned in COSMO 112, COSMO 117 and COSMO 137, including hair and scalp analysis, consultation, scalp and hair care, haircutting and hairstyling.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137 with a “C” grade or better – or instructor's approval.

### **COSMO 163 - Lab Clinic II (9)**

Enhancing skills and knowledge by providing services to clients, models and on the use of mannequins in a realistic salon environment. This course reinforces skills learned within cosmetology 112, 117, and 137 including hair and scalp analysis, consultation, scalp and hair care, haircutting, hairstyling and hair coloring.

Prerequisite: Successful completion of COSMO 147, COSMO 159, and COSMO 167, or instructor's approval.

### **COSMO 167 - General Science of Hair Coloring (6)**

This course offers exploration of relationships in color. Developing the art of the consultation will guide students through the proper formulation and decision making to meet client needs. Students will learn color applications to achieve desired results in addition to the safety and sanitation practices unique to hair coloring.

Prerequisite: Successful completion of COSMO 112, COSMO 117, and COSMO 137.

### **COSMO 172 - Lab Clinic III (10)**

Continue to gain hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation, haircutting, hairstyling, conditioning, hair coloring, and chemical texturizing services on clients/ models.

Prerequisite: Successful completion of COSMO 163, COSMO 181, COSMO 226, or instructor's approval.

### **COSMO 175 - Cosmetology Salon Business Practices (3)**

Introduces the topics of salon business, going into business for yourself, operating a successful salon, and building your business. Topics include identifying options for going into business for yourself, basic factors to consider when opening a salon, business plans, and the importance of record keeping, elements of successful salon operations, and why selling services and products is a vital aspect of a salon's success.

Prerequisite: Successful completion of COSMO 163, COSMO 181, and COSMO 226 or instructor's approval. .

### **COSMO 181 - Artificial Hair (2)**

Provides an informational overview of the fundamentals of

artificial hair products and services. Hair extensions, additions, and hairpieces can be lucrative services in the salon.

Prerequisite: Successful completion of COSMO 147, COSMO 159, and COSMO 167 or instructor approval. .

### **COSMO 183 - General Science of Nails (7)**

Learn to work with the tools required for nail services and practice fundamental techniques for providing clients with a professional manicure or pedicure on natural nails. Develop skills in safety and sanitation associated with nail care. Topics include basic nail theory, nail diseases, disorders and the anatomy of the hands.

Prerequisite: None.

### **COSMO 189 - General Science of Skin (7)**

Provides an introduction to esthetic sciences. Presents applications in temporary hair removal, skin care and cosmetic applications. Emphasizes histology and the recognition of diseases and disorders of the skin. Students will apply infection control principles and practices.

Prerequisite: None.

### **COSMO 226 - Advanced Hair Coloring (8)**

Reinforces skills in application techniques and procedures which continue to develop proficiency and confidence in color design. The student will create aesthetically pleasing designs to enhance client features and haircut designs. Current trends applications such as Balayage, Ombre, and other color services will be performed to meet the demand of services clients seek. Corrective coloring techniques continues to advance the student's skill in formulation of hair color.

Prerequisite: Successful completion of COSMO 147, COSMO 159, and COSMO 167 or instructor's approval. .

### **COSMO 232 - State Board Practical Preparation (6)**

Prepares students to sit for the Washington State Cosmetology or Hair Designer Practical Board examination.

Prerequisite: Successful completion of COSMO 146, COSMO 172, and COSMO 175 or instructor approval.

### **COSMO 233 - Lab Clinic V (6)**

Gain 130 hours of hands-on learning in a realistic salon setting. Fundamental and developing skills are reinforced and expanded as students provide consultation and natural nail care, including manicuring, pedicuring, and safety

issues as they relates to nails. Basic skin care, including histology, hair removal, facial massage, and product application and removal, will also be performed.

Prerequisite: Successful completion of COSMO 234 or instructor's approval.

#### **COSMO 234 - Lab Clinic IV (9)**

Hands on learning experience in Cosmetology Clinic. Reinforced skills and knowledge will be demonstrated through client and student interactions.

Prerequisite: Successful completion of COSMO 146, COSMO 172, and COSMO 175 or instructor approval.

#### **COSMO 237 - State Board Written Test Review (2)**

Prepares students for Washington State Cosmetology or Hair Designer Written Board Examination.

Prerequisite: Successful completion of COSMO 146, COSMO 172, and COSMO 175 or instructor approval.

#### **COSMO 245CAP - Cosmetology Capstone (2)**

Will pursue work experience opportunities. May be supervised internship setting, on site events, and/or practice in CPTC's student run clinic.

Prerequisite: Successful completion of COSMO 146, COSMO 172 and COSMO 175 or instructor approval.

#### **COSMO 248 - Internship I (1)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 33 hours of experience.

Prerequisite: Successful completion of COSMO 234 or Instructor's approval.

#### **COSMO 250 - Internship II (2)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 66 hours of experience.

Prerequisite: Instructor's approval.

#### **COSMO 252 - Internship III (3)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 99 hours of experience.

Prerequisite: Instructor's approval.

#### **COSMO 254 - Internship IV (4)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offers 132 hours of experience.

Prerequisite: Instructor's approval.

#### **COSMO 256 - Internship V (5)**

Provides the opportunity for on-the-job experience and/or the availability to earn required hours of training to complete the program courses. This course offer 165 hours of experience. Internship cannot exceed 10 percent of the total program hours.

Prerequisite: Instructor's approval.

## **CPW - Computer Programming**

#### **CPW 102 - Programming Fundamentals (6)**

Introduction to programming concepts while enforcing good programming style and logical thinking. Designed for students with little or no programming language experience. It begins with basic general programming concepts and key concepts of structure. Course then progresses to the intricacies of decision-making, looping, array manipulation, and methods.

Prerequisite: None.

#### **CPW 122 - Web Design Principles (6)**

Explores how the web works and methods and limitations of delivering content on the web. Examines usability issues such as interface design and structure, and how to accommodate a wide variety of viewports, from smartphones to cinema screen computer monitors. Students will build a 4-page portfolio style website and post it to the live internet.

Prerequisite: Successful completion of CPW 102.

#### **CPW 140 - Java Object-Oriented Programming I (6)**

Construct a foundation of procedural programming concepts and skills requisite for professional object oriented software development. Use Java, a modern structured, object oriented language, to develop your problem-solving and algorithm formulation skills.

Prerequisite: Successful completion of CPW 102.

**CPW 141 - Java Object-Oriented Programming II (6)**

Build your problem-solving skills with the fundamental concepts and techniques of object oriented Java programming in analyzing, designing, and implementing computer programs. Practice problem-solving methods and algorithm development to analyze, design, implement, modify, verify, and document computer programs that solve real-world problems. Develop a good conceptual understanding of data and functional abstraction.

Prerequisite: Successful completion of CPW 140.

**CPW 152 - Principles of Relational Databases (6)**

Delve into the fundamental concepts, terminologies, methodologies, and system organizations of database management systems. Develop the theoretical foundation of understanding necessary to design, implement, optimize, and query and maintain a database system. Propose, design and develop a database, using a relational database management system to reinforce the theoretical concepts

Prerequisite: None.

**CPW 155 - .NET Programming (6)**

Create programs using the .NET Framework with focus on desktop and console applications. Use decision structures, loops, and arrays to solve problems. Apply exception handling and data validation to programs. Use the predefined libraries in .NET Framework to solve problems. Create methods and learn to pass and return arguments. Create classes and use the classes as objects in programming. Use databases to store and retrieve the data from the applications.

Prerequisite: Successful completion of CPW 140 and CPW 152.

**CPW 207 - Object-Oriented Analysis & Design (4)**

Explore methodologies and technologies used in analyzing, designing and developing object-oriented software systems intended to solve real-world problems. Build on the Systems Development Life Cycle (SDLC) model initially presented in the CPW 102 course to model and design systems using tools such as CRC cards, and the Unified Modeling Language (or UML, which includes class, use case, and sequence diagrams). Discuss the theoretical and practical aspects of object orientation.

Prerequisite: Successful completion of CPW 245.

**CPW 211 - Advanced .NET Programming (4)**

Learn advanced .NET programming — writing classes,

working with indexers, overloading operators, and other advanced object-oriented concepts. Work with databases using ADO.NET, Databinding, and object-relational mappers. Learn techniques for working with non-relational data storage

Prerequisite: Successful completion of CPW 155.

**CPW 219 - .NET Web Programming (3)**

Earn professional experience in analyzing, designing, and developing dynamic, data-driven, commercial web applications using Microsoft ASP.NET. Gain a solid foundation in web development covering topics from state management, security, using various data stores, working with forms, and more.

Prerequisite: Successful completion of CPW 155 and CPW 122. Corequisite: CPW 211.

**CPW 226CAP - Portfolio (4)**

Build a portfolio website showcasing skills developed in the Computer Programming and Web Development program. Create a fully functional website from start to finish. Analyze and derive requirements by creating a project proposal or by working with an actual client. Larger projects will utilize source control and emphasize team work.

Prerequisite: Successful completion of CPW 230 and CPW 235.

**CPW 228 - C++ (4)**

Deals with learning programming using C++ as the primary language with focus on problem-solving and introduction to object-oriented concepts and terms.

Prerequisite: Successful completion of CPW 245.

**CPW 230 - Advanced .NET Web Programming (6)**

Build upon existing fundamental ASP.NET skills. Learn how to build scalable, secure, and maintainable web applications. Apply advanced object-oriented techniques while diving deeper into design patterns. Learn how to create and consume web services. Explore server architecture and data storage options with the public cloud.

Prerequisite: Successful completion of CPW 211 and CPW 219.

**CPW 235 - Software Project Development (6)**

Students will engage in a medium sized practical software development project, emphasizing collaboration, industry-standard practices, and a focus on real-world scenarios.

The class will delve into the entire software development lifecycle, from requirements gathering to deployment, emphasizing shorter iterations. Students will work in teams, manage source code, and apply agile methodologies. Additionally, they will gain experience with existing codebases and learn how to adapt and enhance them.

Prerequisite: Successful completion of CPW 211, 219, and 245.

#### **CPW 245 - Data & Logic Structures (5)**

Expand your understanding of object-oriented programming techniques by implementing abstract data types as data structures in solving complex computing problems. Study the fundamental algorithms of computer science while using mathematical principles to analyze the efficiency of their implementation.

Prerequisite: Successful completion of CPW 141.

#### **CPW 299CAP - Internship (5)**

Earn college credit by applying learned technical skills in professional work experiences directly related to your studies in Computer Programming and Web Development. Perform 165 hours of part-time or full-time labor as an intern with a public or private enterprise, as a paid employee, or as a volunteer. Study and practice in resume building, interviewing, and job-search skills by actually identifying and then applying for an intern position. Work site supervisor and CPW faculty will jointly evaluate your performance.

Prerequisite: Instructor's permission.

## **CPW - BS Computer Science and Cyber-Physical Software Engineering**

#### **CPW 300 - Discrete Structures (5)**

The course covers mathematical topics essential for work in computer science. Topics include: number bases, mathematical induction, sets, relations, functions, congruence, recursion, combinations and permutations, probability, graphs, trees, logic, Boolean algebra, and proof techniques.

Prerequisite: Successful completion of CPW 245, 228, and 207.

#### **CPW 310 - Computer Architecture & Operating Systems (Embedded Systems) (5)**

This course covers the fundamental issues in the design of modern computer systems, including the design and implementation of key hardware components such as the processor, memory, and I/O devices, and the software/hardware interface. This course also covers principles of operating systems, including process management, memory management, auxiliary storage management, and resource allocation. These concepts will be applied to cyber-physical systems.

Prerequisite: Successful completion of CPW 228, 245, and 207.

#### **CPW 320 - Algorithms (5)**

The course covers techniques for the design and analysis of efficient algorithms, emphasizing methods useful in practice. Topics include sorting, search trees, heaps, and hashing, divide-and-conquer, dynamic programming, greedy algorithms, amortized analysis, graph algorithms, and shortest paths. Advanced topics may include network flow, computational geometry, number-theoretic algorithms, polynomial and matrix calculations, caching, and parallel computing.

Prerequisite: Successful completion of CPW 245 and MATH& 141.

#### **CPW 330 - Software Design (5)**

The course covers the software life cycle activity in which parameters outlined and defined in the Requirements process are translated into a description of a software system's internal structure that can be used as a basis for construction. This course begins with design fundamentals, including concepts, context and processes. It then progresses through key design issues; structure and architecture; user interface design; design quality analysis and evaluation. These concepts will be applied to cyber-physical systems.

Prerequisite: Successful completion of CPW 320.

#### **CPW 400 - Software Capstone I (5)**

This course covers all aspects of a software development project with special emphasis on topics like Software Development Life Cycle, requirements elicitation, change management, and documentation. These concepts will be applied to cyber-physical systems.

Prerequisite: Successful completion of CPW 330 and MATH& 142.

**CPW 410 - Software Capstone II (5)**

This course covers all aspects of a software development project with special emphasis on topics such as object-oriented design, UML class diagrams, UML sequence diagrams, use case diagrams, and scenarios. These concepts will be applied to cyber-physical systems.

Prerequisite: Successful completion of CPW 400.

**CPW 420 - Software Capstone III (5)**

This course covers all aspects of a software development project with special emphasis on topics like unit testing, integration testing, and acceptance testing. These concepts will be applied to cyber-physical systems.

Prerequisite: Successful completion of CPW 410.

**CSSP - Central Service / Sterile Processing****CSSP 101 - Intro Central Service/ Sterile Processing (4)**

Covers the history and evolution of the Central Service/Sterile Processing profession. Topics include exploring the overall makeup of the human body, its systems and functions. The related medical/surgical terminology and human relations.

Prerequisite: None. Corequisite: None.

**CSSP 105 - Sterile Processing Theory (4)**

Covers microbiology and infection prevention as it relates to the sterilization process. The topics include safety, risk management, legal issues regulatory agencies effecting this field. This unit satisfies the Washington State Law for mandatory HIV/HBV and Bloodborne Pathogen training for healthcare personnel.

Prerequisite: None. Corequisite: None.

**CSSP 125 - Surgical Instrumentation (6)**

Course 150 teaches students to identify basic and complex surgical instruments. Students will demonstrate thorough knowledge of the manufacture, care, and processing of surgical instrumentation including endoscopic, robotic, and power instruments. Students learn the special protocols required with loaner instruments. This course provides hands on learning in a simulated work environment. Web enhanced

Prerequisite: CSSP 101, CSSP 105. Corequisite: None.

**CSSP 126 - Principles & Methods of Cleaning & Disinfecting (6)**

Classroom and laboratory experience in the fundamentals of cleaning and disinfection. Topics include water quality, water purification systems, chemical cleaning and disinfecting agents, handling and transporting of patient care equipment, and general cleaning protocols for instruments and equipment. The proper and safe handling of infectious waste is included. Web enhanced.

Prerequisite: Successful completion of CSSP 101, CSSP 105, & CSSP 125. Corequisite: None.

**CSSP 129 - Principles & Practices of Sterilization (6)**

Students learn techniques and practice in the packaging, assembly, and sterilization of procedural trays, instrument sets, and sterile supplies. Major topics include methods of high- and low-temperature sterilization, sterilization chemicals, and packaging materials. Guidelines for point-of-use processing and transport are discussed. Operations, parameters, and maintenance of various sterilizers are learned, as well as monitoring of the sterilization process and quality control. Proper storage and storage concerns for sterile supplies are included.

Prerequisite: Successful completion of CSSP 101, CSSP 105, & CSSP 125. Corequisite: None.

**CSSP 132 - Materiel Management/Central Service Applications (3)**

This course is an overview of the handling and distribution of materials in a medical facility. Topics covered include inventory management, replenishment methods, and tracking systems. Students become familiar with quality assurance measures and techniques.

Prerequisite: Successful completion of CSSP 101, CSSP 105 & CSSP 125. Corequisite: None.

**CSSP 213 - Clinical Internship I (6)**

Provide the student with the opportunity to apply the theories and principles of Central Service learned in the classroom to the actual work experience in a Central Service or Distribution Department. The role of the CS Technician in a hospital Central Service Department will be the focus. In order to participate in the clinical aspect of the program, students must receive a "No Record on File" report from the Washington State Patrol, re: Crimes against Person, have proof of current immunizations, compete CPT for healthcare professionals, and be able to lift 50 pounds. , and be able to work on their feet for up to eight hours.



Prerequisite: Successful completion of CSSP 101, CSSP 105, CSSP 125, CSSP 126, CSSP 129, & CSSP 132.  
Corequisite: None.

### **CSSP 215 - Clinical Internship II (6)**

Continued participation in the clinical setting at local facilities allows students to gain a variety of experiences in central service/ sterile processing and materiel management. Requirements are the same as MMN 213.

Prerequisite: Successful completion of CSSP 126, CSSP 129, & CSSP 132. Corequisite: None.

## **CUL - Culinary Arts**

### **CUL 104 - Sanitation in Food Service Operations (3)**

Presents the principles of food microbiology, food-borne illness and the standards enforced by regulatory agencies. Incorporates applied measures for the prevention of food-borne illness and other microbiological factors. Includes National Restaurant Association ServSafe Certification.

Prerequisite: None.

### **CUL 110 - Restaurant Cooking I (5)**

Provides students with the opportunity to attain fundamental cooking competencies. These include standard breading procedures; blanching and parboiling; identifying basic vegetable cuts by name, size and shape; demonstrating how to read, write and follow a standard recipe; and understanding the basic principles of various cooking methods.

Prerequisite: None.

### **CUL 111 - Food Preparation I (3)**

Practice and apply the skills of a restaurant cook. Students will learn the importance of organizing and planning their work stations, as well as preparing items needed prior to actual cooking. Topics include fruit and vegetable varieties, uses, and preparation.

### **CUL 113 - Introduction to Baking (3)**

Introduces culinary students to the fundamentals of baking and to scientific principles. Students will learn different mixing and production methods in producing quick breads, pastries, cakes, pies, soufflés, mousses, and custards.

### **CUL 119 - Food Preparation II (3)**

Provides practice in the fundamental techniques related to hot food cooking. Students will perform specific competencies to develop their proficiency in the techniques

and science of cooking. Topics that will be covered are pasta, potatoes and grain cookery.

Prerequisite: None.

### **CUL 124 - Restaurant Cooking II (5)**

Introduces students to the experience of preparing and cooking meals for restaurant service. Students will be given assignments and will rotate through restaurant stations throughout the quarter. Students will be expected to practice a high level of previously learned competencies in knife skills, sanitation, proper handling and storage of product and working under stringent time guidelines.

Prerequisite: Successful completion of CUL 110 Restaurant Cooking I.

### **CUL 132 - American Regional Cuisine (3)**

Explores the history and styles of food from the Pacific Northwest, California, the Southwest, New England, and Florida. Students will create regionally-inspired dishes with continued emphasis on solid cooking methodologies.

Prerequisite: None.

### **CUL 135 - Food Preparation III (Meat Fabrication) (3)**

Focuses on beef, chicken, and fish cookery and fabrication. Instruction will center on understanding the structure and composition of meats, being able to identify a variety of fish and shellfish, use of proper storage, and application of various cooking methods.

Prerequisite: None.

### **CUL 140 - Restaurant Cooking III (5)**

Introduces students to the experience of a leadership role in the kitchen brigade system. Students will be in the rolls of station lead cook, expeditor, and sous chef. Demonstrate advanced cooking skills. Show other students basic and intermediate cooking skills. Students will direct activates in the kitchen during restaurant operations.

Prerequisite: Successful completion of CUL 110 and CUL 124 - Restaurant Cooking I & II.

### **CUL 145 - Kitchen Equipment and Flavorings (2)**

Provides the student with a general understanding of the professional kitchen. Topics include kitchen safety, dishwasher procedures, how to handle food in a safe environment, selection and caring of knives, understanding of how a professional kitchen is organized and the recognition, cleaning, and appropriate function of a variety of kitchen equipment. Students will learn to cut foods in a

variety of shapes as well as recognize and use a variety of herbs and spices.

Prerequisite: None.

### **CUL 150 - Breakfast and Dairy (3)**

Introduces students to breakfast cookery and dairy products. Students will learn the composition of eggs, proper storage of eggs and dairy, apply various cooking methods to eggs, prepare a variety breakfast foods, process of pasteurization, types of cultured dairy products, butter and cheeses.

Prerequisite: None.

### **CUL 155 - Charcuterie (3)**

Introduces students to procedures for making common charcuterie items. The preparation of sausages as well as curing methods, including salt curing, brining and both cold and hot smoking is discussed.

Prerequisite: None.

### **CUL 160 - Meat Cookery (3)**

Introduces students to meat cookery. Students will learn the principles of heat transfer and the effect on foods, understand how different meats are graded and inspected, understand the structure and composition of meats and apply the appropriate cooking method to a variety of meats.

Prerequisite: None.

### **CUL 165 - Salads and Appetizers (3)**

Introduces students to procedures for making salads, dressings and appetizers. Topics will include types of salads and dressings, including tossed, bound and composed salads. Types of appetizers will also be discussed including canapés, caviar, other hors d'oeuvres and their service options.

Prerequisite: None.

### **CUL 168 - Soups and Sandwiches (3)**

Introduces students to broth soups, consommés, thick and pureed soups. Students will identify different types and styles of sandwiches and prepare a variety of hot and cold sandwiches.

Prerequisite: None.

### **CUL 170 - Stocks and Sauces (3)**

Covers the procedures and techniques of sauces and

stocks. Students will learn how to prepare a variety of classic hot and cold sauces, use thickening agents properly, recognize and classify sauces and prepare a variety of stocks.

Prerequisite: None.

### **CUL 175 - Menu Design (3)**

Provides students with the general idea of menu creation. Topics include standardized recipes, station setup sheets, recipe cost, menu engineering and menu descriptions. Students will create, cost and run a menu in the programs restaurant.

Prerequisite: None.

## **DAS - Dental Assistant**

### **DAS 104 - General Studies (3)**

This course will introduce the students to the dental profession, ethics and jurisprudence, dental terminology, diversity, and preparing for patient care.

Prerequisite: None. Corequisite: None.

### **DAS 108 - Biomedical Sciences (5)**

This course will introduce the students to Microbiology, Infection Control, Sterilization, Management of Hazardous Materials, and Ergonomics.

Prerequisite: None. Corequisite: None.

### **DAS 112 - Dental Sciences I (4)**

This course will introduce the student to tooth morphology, oral embryology and histology, landmarks of the face and oral cavity, and oral health and nutrition to include dental caries, preventative dentistry and nutrition.

Prerequisite: None. Corequisite: None.

### **DAS 114 - Dental Assisting Skills I (4)**

This course is an introduction to basic dental assisting skills to include moisture control techniques, lab safety, alginate impressions, diagnostic casts, and proper technique for accurately obtaining blood pressure and pulse, and dental charting.

Prerequisite: None. Corequisite: None.

### **DAS 117 - Foundations of Clinical Dentistry (2)**

This course will introduce the students to assisting in a medical emergency, the dental office, and delivery of

dental care.

Prerequisite: None. Corequisite: None.

**DAS 121 - Dental Sciences II (2)**

This course will introduce the students to oral pathology, restorative and esthetic dental materials, dental liners, bases and bonding systems, dental cements, general anatomy and physiology and head and neck anatomy.

Prerequisite: Successful completion of DBOA103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117 .

**DAS 123 - Dental Assisting Skills II (5)**

This course will introduce students to intermediate study models, rubber dam principles, intermediate dental charting, coronal polish and fluoride treatment, and dental instruments and handpieces.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117 .

**DAS 127 - Dental Specialties I (4)**

This course will introduce students to the dental specialties of orthodontics, endodontics, and periodontics.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 108, DAS 112, DAS 114, and DAS 117.  
Corequisite: None.

**DAS 131 - Principles of Radiography (6)**

This course will introduce students to dental radiographic techniques and patient and operator safety, intraoral and extraoral radiographic imaging, legal issues associated with radiography, quality assurance, and manual and automatic radiographic processing techniques.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117. .

**DAS 133 - Certification Review I (2)**

This course will prepare students to take the Dental Assistant National Board Infection Control exam.

Prerequisite: Successful completion of DBOA 103, DAS 104, DAS 107, DAS 112, DAS 114, and DAS 117. .

**DAS 207 - Dental Sciences III (4)**

This course will introduce the students to pharmacology, anesthesia and pain control, lab and impression materials and procedures, and the medically and physically compromised patient and advanced radiographic techniques.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam.

**DAS 209 - Dental Assisting Skills III (5)**

This course will introduce students to general dentistry and matrix systems, employment, advanced study models, advanced chairside assisting, advanced charting, and advanced rubber dam. This course will culminate in a capstone chairside assessment.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

**DAS 213 - Dental Specialties II (5)**

This course will introduce students to the dental specialties of fixed prosthodontics, removable prosthodontics, dental implants, oral and maxillofacial surgery, and pediatric dentistry, including expanded functions in pit and fissure sealant application, assisting in a crown prep appointment. Including construction of custom provisionals, assisting in the delivery of a partial denture and assisting in a routine extraction.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114m, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

**DAS 215 - Certification Review II (2)**

This course will prepare students to take the Dental Assistant National Board Radiation Health and Safety exam.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. .

**DAS 218 - Clinical Experience I (2)**

Provides Dental Assistant students with the opportunity to use the skills and information acquired in DAS 103-215. Students will spend 6 hours per week - for a total of 66 hours - volunteering in an infection-control assistant capacity in a private office or dental clinic.

Prerequisite: Successful completion of DAS 121, DAS 123, DAS 127, DAS 131, DAS 133 and completion of the Infection Control component of the Dental Assistant National Board certification exam. Corequisite: None.

### **DAS 220CAP - Clinical Experience II (6)**

This course will provide the Dental Assistant student with the opportunity to utilize the skills and knowledge acquired in DBOA 103-237. Students will spend the majority of their final quarter, 300 hours, rotating through a minimum of two dental offices and/or dental clinics, functioning in an Expanded Functions Dental Assistant capacity. This course will consist of the first 135 hours of the total clinical experience.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DBOA 119, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133, DAS 207, DAS 209, DAS 213, DAS 215, DAS 218, Infection Control certification, and completion of the Radiation Health & Safety component of the Dental Assistant National Board certification exam. .

### **DAS 225 - Clinical Experience III (6)**

This course will provide the Dental Assistant student with the opportunity to utilize the skills and knowledge acquired in DAS 104-220. Students will spend the majority of their final quarter, 300 hours, rotating through a minimum of two dental offices and/or dental clinics, functioning in an Expanded Functions Dental Assistant capacity. This course will consist of the second 135 hours of the total clinical experience.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DBOA 119, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133, DAS 207, DAS 209, DAS 213, DAS 215, DAS 237, Infection Control certification, and completion of the radiation Health and Safety component of the Dental Assistant National Board certification exam. .

### **DAS 230 - Certification Review III (2)**

This course will prepare students to take the Dental Assistant National Board General Chairside exam.

Prerequisite: Successful completion of DBOA 103, DBOA 111, DBOA 119, DAS 104, DAS 107, DAS 112, DAS 114, DAS 117, DAS 121, DAS 123, DAS 126, DAS 131, DAS 133, DAS 207, DAS 209, DAS 213, DAS 215, DAS 237, Infection Control certification, and completion of the Radiation Health & Safety component of the Dental Assistant National Board certification exam. .

## **DBOA - Dental Assistant**

### **DBOA 103 - Dental Terminology & Procedures (4)**

The Course provides information to correctly recognize and identify various occupations within the dental environment. Students will study basic dental terminology necessary to complete all other courses. Information provided to accurately identify the names and numbers of teeth in the primary and permanent dentition, and dental treatment descriptions. Students will complete the Washington State Dental Association (WSDA)HIV/AIDS course.

### **DBOA 111 - Dental Charting, Scheduling and Recall Management (5)**

Explores dental charting symbols and treatment descriptions. Students will develop, decipher, and present a comprehensive treatment plan. Covers the necessary information to accurately develop a patient recall system and maintain productive and effective patient scheduling. Identify and mount a complete series of 18 radiographs. Students will have training and 24-hour access to the Dentrix Dental Software to learn and practice dental charting, scheduling, and recall procedures.

Prerequisite: DBOA 103 (or co-requisite). DBOA 104.

### **DBOA 119 - Dental Documents and Inventory Systems (4)**

Explores a wide variety of dental office forms and the development of manual and computerized inventory filing systems. Organizational skills are the primary emphasis of this course.

Prerequisite: DBOA 103 (or co-requisite).

### **DBOA 135 - Dentrix Advanced Training (2)**

Provides expanded Dentrix software skills to students with basic Dentrix Dental Software training or experience. Students will have training and 24-hour access to the software. Students will demonstrate setting up practice defaults in the Office Manager module, manage electronic charting in the Dentrix Dental Software, pursue dental insurance claims processing and payment posting processes, and explore and generate management reports.

Prerequisite: DBOA 111 or industry experience with the Dentrix Dental Software (or co-requisite).

## DED - Digital Entertainment Design and Production

### DED 102 - Genre Studies (3)

Covers the history of film and how economics and politics have affected the film industry.

Prerequisite: Successful completion of ENG 094 or equivalent placement. Corequisite: COLL 102 College Success for All.

### DED 105 - General Art (3)

General Art will cover the fundamentals of traditional pencil and paper art and basic skills of visual expression. Students will be using the Elements of Art and Design as building blocks to help them analyze and break down the everyday things around them into pencil and paper sketches. Along their journey, students will discover a variety of styles within each building block that can help them express themselves as a person.

Corequisite: COLL 102 College Success for All.

### DED 107 - Digital Art I (3)

This course is an overview of industry software tools that are used in the creation of 2D computer graphics. Students will learn the commands and the interfaces of industry-standard vector graphics.

Corequisite: COLL 102 College Success for All.

### DED 108 - Screenwriting (3)

Introduces the fundamentals of working with and scripts for many different media projects. This will include but is not limited to, the creation and breakdown of scenes using voice, action, and dialogue.

Prerequisite: Successful completion of ENG 094 or instructor permission. Corequisite: ENGL& 101 English Composition I, if not already completed.

### DED 114 - Digital Art II (3)

Digital Art II will be focusing on advancing the student's knowledge and skills in industry-standard digital graphics programs. Students will be learning to use the tools of these programs provided for advanced techniques. In each assignment is a real-world situation, in which they will be following color theory, compositions, and elements of art and design. This class will also help increase your productivity and incorporate best practices into your workflow.

Prerequisite: Successful completion of DED 107.

### DED 117 - Introduction to Video and Game Creation (4)

The purpose of this course is to introduce the students in fundamentals of filmmaking and game development. Students will participate in an overview of both processes in an effort to introduce them to the types of tasks that are involved in the workflow of each medium. Students will complete small projects that are designed to be beginner-friendly taste of each of the disciplines before the students are required to choose their medium for the program.

Corequisite: COLL 102 College Success for All.

### DED 130 - Storyboarding (3)

Teaches students how to break down a script into shots and create a visual storyboard that shows actor and camera movements while showing the type of camera angle and shot.

Prerequisite: Successful completion of DED 105.

### DED 137 - Motion Graphics I (3)

The program's 2D and 3D compositing, animation, and visual effects tools allow users to create innovative graphics and visual effects for film, video, broadcast, DVD, and the web. Using Adobe After Effects, students will learn the concepts of video, time-based animation, and special effects. We will explore program features that include keyframing, editing, masking, type, 3D environment, and tools. Importing media from a wide variety of applications, including Adobe Photoshop and QuickTime files will also be covered.

Prerequisite: Successful completion of DED 114.

### DED 138 - Advanced Development Tools (4)

A course covering the use of advanced tools of media production. Students will develop projects using the industry tools of their medium. Students will choose between using the advanced software of their medium to create professional-grade projects to use in a personal portfolio showcasing their talents and skills.

Corequisite: DED 165.

### DED 139 - Video and Game Creation I – Basic Production Tools (4)

In this course, students will choose a medium, either film or game and begin building a skill set in the design and development of projects in the chosen medium. Students

who choose film will begin learning the use of industry equipment like cameras, and tripods, along with compositional skills, editing techniques, and camera work. Students who choose the game side will begin working on the design and creation of a 2D game using industry-standard software and tools.

Prerequisite: Successful completion of DED 117.

### **DED 149 - 3D Modeling I (3)**

Students will be using 3D Studio Max, specialized software that is commonly used to create 3-Dimensional objects and scenes. The course will lead students through class tutorials and weekly assignments. The majority of the class is spent becoming familiar with the software and learning basic techniques such as box modeling. By completing this class, students should be able to create models that can be used in film or games.

Prerequisite: Successful completion of DED 114.

### **DED 151 - Video and Game Creation II – Visual Design Tools (4)**

In this course, students will further develop their skills in the creation of digital content. They will develop their abilities to use environments to aid in the telling of stories and the creation of worlds that viewers will want to explore further. Students who have chosen the film track will begin working on the creation of scenes, designing environments through lighting, locations, and environments that enhance the story and characters in their projects. Students who have chosen the game track will begin working with 3D virtual environments and the creation of engaging environments that will draw the player deeper into the experience.

Prerequisite: Successful completion of DED 139.

### **DED 153 - Motion Graphics II (3)**

Motion Graphics II will be continuing from the previous Motion Graphics I course, working on more advanced features in Adobe After Effects. Students will be going more in-depth with the features such as particles, photo replacements, and integrating 3D models into scenes to create digital effects for scenes.

Prerequisite: Successful completion of DED 137.

### **DED 155 - Video and Game Creation III – Intermediate Production Tools (4)**

In this course, students will further develop their skills in the production of digital media with a special focus on the creation and implementation of audio tools in their chosen

medium. Students will use physical equipment and digital tools to create and implement audio assets for their media projects.

Prerequisite: Successful completion of DED 151.

Corequisite: Any 100-Level Math class, if not already completed.

### **DED 157 - 3D Modeling II (3)**

Students will be taking their education in the 3D world another step further by learning to create textures for their 3D Models, whether it's for an artistic abstract style or a realistic gritty detailed look. This class will discuss the importance of file size and formats for a variety of purposes when going into creating detailed textures. We will be creating a variety of texture maps like UV Mapping, diffused, opacity, bump, normal, specular, and reflection maps to really bring our models to life.

Prerequisite: Successful completion of DED 149.

### **DED 165 - Video and Game Creation IV – Advanced Production Tools (4)**

In this course, students will learn the use of advanced techniques in the creation of various visual effects in the creation of digital media products. Students will work with advanced VFX creation tools, based on their chosen medium, to bring their projects to the next level.

Prerequisite: Successful completion of DED 155.

### **DED 169 - Video and Game Creation V – Advanced Design Theories (4)**

In this course, students will focus on the deconstruction of industry productions using various tools of analysis. Students will focus on industry leaders' design theories and decisions and examine the various influences and contributions that lead to those decisions.

Prerequisite: Successful completion of DED 165.

### **DED 173 - 3D Animation (3)**

Introduces the overview of methods and techniques for animating virtual objects and environments using 3D Studio Max. Bring life to your 3D Models with basic animation techniques by using and combining modifiers to control the animation. Explore the features such as keyframes, track view, function curves, animation constraints, and controllers.

Prerequisite: Successful completion of DED 157.

### **DED 176 - 3D Modeling III (3)**

Students will learn advanced techniques in modeling using 3D software, 3D Studio Max such as NURBS, lighting and reflection effects, and particle systems. Students will apply this to creating organic and hard surface models.

Prerequisite: Successful completion of DED 157.

### **DED 177 - Digital Photography (3)**

Digital Photography is an introductory course that will familiarize the student with the basics of the camera, the new features of today's DSLRs, and the basic elements of taking a good photograph. The students will explore the work of great artists of the medium, learn the elements of composition, and begin working with light and shadow to create visually interesting images. The students will begin to use photographic lights to take studio-style photographs of still life and work up to portrait photography.

### **DED 181 - Entertainment Philosophy (3)**

In this general discussion class, students will have an opportunity to take new approaches to look at the past, present, and the possible future of the Digital Entertainment Industry. Whether it relates to trends, society, or current events, the students will have an opportunity to discuss their thoughts on the causes and effects.

Prerequisite: Successful completion of DED 102.

### **DED 184 - Interactivity Guidance (3)**

A class exploring the interaction between the technical skills of digital entertainment creators and their deliverable products. Students will work in their respective mediums to take control of communications between their medium and their audience to create new digital entertainment projects.

Prerequisite: Successful completion of PSYC& 100.

### **DED 270 - Development Project (3)**

Students will use what they have gained throughout the program to create a project that they will pitch to the instructor to be approved. They must keep track of and lead the project using management tools to present their final project at the end of the quarter.

Prerequisite: Successful completion of DED165.  
Corequisite: DED280 CAP Portfolio Creation.

### **DED 275 - Internship (3)**

Students can use this opportunity to take on a part-time

position as an intern with a licensed company that fits with in the study of Digital Entertainment. This course can be taken alongside or as a replacement for the DED270 Development Project course. The student will be required to get instructor's approval of the internship before enrolling.

Prerequisite: Instructor permission. Corequisite: DED 280 CAP Portfolio Creation.

### **DED 280 CAP - Portfolio Creation (3)**

In this course, the students will be taking their final steps in the program and begin preparing for the industry. This will consist of researching the industry and job opportunities, networking, creating resumes and cover letters, and creating a demo reel and portfolio.

Prerequisite: Successful completion of DED165 and DED138. Corequisite: DED270: Development Project, OR DED 275: Internship.

## **DSN - Interior Design**

### **DSN 110 - Introduction to Interior Design (5)**

Discover interior design as both a creative and complex professional opportunity.

### **DSN 115 - Design Communication I (5)**

Introduces components of interior documents and standard practices of drafting technical representations of interior design.

### **DSN 125 - Drawing and Rendering (5)**

Introduces methods of communicating design intent through various drawing and rendering techniques.

### **DSN 131 - Design Communication II (5)**

Use computer-aided drafting to develop components of interior construction documents.

Prerequisite: DSN 115 - Design Communication I.

### **DSN 139 - Materials, Furnishings and Specifications I (5)**

Analyze materials and finishes, manufacturing, and installation methods for residential design applications.

### **DSN 146 - Concept Development and Ideation (5)**

Explore methods of concept development and ideation for use throughout the design process.

Prerequisite: DSN 115 - Design Communication I, DSN

125 - Drawing and Rendering.

### **DSN 155 - Design Communication III (5)**

Explore the use of two- and three-dimensional computer-aided drafting and modeling software used for interior contract documents and presentation.

Prerequisite: DSN 131 - Design Communication II.

### **DSN 162 - History of Interiors (5)**

Examine the history of interiors, furnishings, and decorative arts.

### **DSN 167 - Interior Planning I (5)**

Introduces space planning techniques, diagrams, building codes, design concepts, and the visualization of residential interiors in response to client programming.

Prerequisite: DSN 131 - Design Communication II, DSN 146 - Concept Development & Ideation.

### **DSN 202 - Elements of Kitchen & Bath Design (5)**

This course is an introduction to the principles and elements of design for kitchens and bathrooms, including basic components, mechanical and lighting systems, color theory, and construction applications.

### **DSN 206 - 20/20 Drafting (5)**

Learn to design kitchen and bath spaces using 20-20 Design software. Skills learned include the execution of floor plans, elevation drawings, rendered perspectives, reports, and design layouts.

### **DSN 208 - Materials & Estimating (4)**

This course is an introduction to recommending and calculating quantities for cabinetry, appliances, plumbing fixtures, lighting, hardware, and surfacing materials for kitchens and bathrooms.

### **DSN 211 - Business Procedures & Sales (4)**

This course provides students with the understanding of business practices generally conducted by interior designers. The study will acquaint students with the basic procedures, documents, ethical conduct, associations, and certification requirements within various business formats. This course is designed to address current topics on interior design and help prepare students for a professional job search.

### **DSN 212 - Lighting (5)**

Learn about the principles of natural and artificial lighting

and their application in interior environments.

Prerequisite: DSN 155 - Design Communication III.

### **DSN 215 - Sustainable Design: An Overview (5)**

Explores the history and principles associated with green and sustainable design. This course uncovers how the built environment affects people and the natural environment, environmental movements throughout history, green building assessment methods and certification programs, and the environmental responsibilities associated with the interior design profession.

Prerequisite: Basic competency with computers and navigating the web.

### **DSN 217 - Project I (5)**

Apply the design process, elements and principles of design, and codes, standards and guidelines to create a comprehensive solution to a residential interior design problem.

Prerequisite: DSN 139 - Materials, Furnishings and Specifications I, DSN 167 - Interior Planning I, DSN 155 - Design Communication III.

### **DSN 220 - Professional Practice (5)**

Examines the principles and responsibilities that define the profession of interior design and business practice.

### **DSN 224 - Sustainability for Residential & Commercial Applications (4)**

Examines sustainable approaches to the built environment, including preservation, rehabilitation, restoration, and reconstruction. This course also looks at applying sustainable design elements to residential and a variety of commercial project types.

Prerequisite: It is recommended to have completed or be concurrently enrolled in DSN 215. Basic competency with computers and navigating the web.

### **DSN 226 - Sustainable Strategies in Design (5)**

Introduces sustainable strategies for the integrated interior environment, including identifying materials, products, lighting systems, and building components that embody the principles of sustainability.

Prerequisite: It is recommended to have completed or be concurrently enrolled in DSN 215. Basic competency with computers and navigating the web.



**DSN 229 - Sustainable Interiors & the Integrated Design Process (5)**

Covers the steps to design and present a green interior space. Students will learn more about the integrated design process, develop their own sustainable interior design, and present it in a professional manner in preparation for real-life sustainable design proposals.

Prerequisite: Completed or concurrently enrolled in DSN 215, DSN 224, and DSN 226. Basic competency with computers and navigating the web.

**DSN 230 - Materials, Furnishings and Specifications II (5)**

Analyze materials and finishes, manufacturing, and installation methods for commercial design applications.

Prerequisite: DSN 139 - Materials, Furnishings and Specifications I, DSN 167 - Interior Planning I.

**DSN 235 - Interior Planning II (5)**

Introduces space planning techniques, diagrams, building codes, design concepts and the visualization of commercial interiors in response to client programming.

Prerequisite: DSN 155 - Design Communication III, DSN 167 - Interior Planning I.

**DSN 246 - Special Topics in Design (5)**

Explores special topics which may include current design issues, emerging trends, new technologies, and special areas of practice.

Prerequisite: DSN 217 - Project I DSN 220 - Professional Practice.

**DSN 250 - Project II (5)**

Apply the design process, elements and principles of design, and codes, standards and guidelines to create a comprehensive solution to a commercial interior design problem.

Prerequisite: DSN 230 - Materials, Furnishings and Specification II, DSN 235 - Interior Planning II.

**DSN 255 - Portfolio and Professional Presentation (5)**

Compose a portfolio of design work and other marketing materials in preparation for entry into interior design professional practice.

Prerequisite: DSN 217 - Project I DSN 235 - Interior Planning II.

**DSN 260 - Internship (4)**

Experience the interior design industry by procuring and participating in an internship at a workplace of interest.

Prerequisite: DSN 220 - Professional Practice, DSN 230 - Materials, Furnishings and Specifications II, DSN 235 - Interior Planning II.

**DSN 265 - (Optional) Independent Study (3)**

Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite: Instructor's approval.

**DSN 270 - (Optional) Independent Study (4)**

Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite: Instructor's approval.

**DSN 280 - Industry Exploration (4)**

Explores resources and opportunities in interior design leading to an informed understanding of the industry and in preparation for a design career.

Prerequisite: DSN 220 Professional Practice, DSN 230 Materials, Furnishings and Specifications II.

**DSN 275 - (Optional) Independent Study (5)**

Explore or expand knowledge of interior design within an independent study format. With guidance and instructor's approval, students will select a meaningful project within an area of interest to strengthen their range of abilities. Students will fulfill several pre-approved objectives at the conclusion of the course, completing a self-assessment and final presentation to the instructor.

Prerequisite: Instructor's approval.

**DSN 310 - Interior Construction & Building Systems (5)**

Examine the basic components and practices of interior

construction and building systems to better understand the built environment and factors that may affect design.

### **DSN 312 - Building Information Modeling I (5)**

Create design drawings using building information modeling software. Students will learn to navigate the software and develop a basic drawing/model for interior design.

Prerequisite: DSN 155 - Design Communication III.

### **DSN 314 - Building Information Modeling II (5)**

Produce drawings with increased detail and information using building information modeling software, further exploring the program's drafting, formatting, and rendering capabilities.

Prerequisite: Successful completion of DSN 312 or equivalent.

### **DSN 316 - Environmental & Sustainable Interiors (5)**

Examine environmentally friendly and sustainable practices in interior design. Topics include environmental movements throughout history, building assessment methods and rating systems, local, national and international laws, energy and water conservation, indoor air quality, and the many materials and products that are available on the market today.

Prerequisite: DSN 146 - Concept Development and Ideation, DSN 212 - Lighting, DSN 230 - Materials, Furnishings and Specifications II.

### **DSN 350 - Intermediate SketchUp for Interior Design (5)**

Develop intermediate skills using SketchUp modeling software by further exploring its modeling capabilities, and learning to import files, produce drawing layouts, and work with SketchUp plug-ins to produce more photorealistic renderings.

Prerequisite: Successful completion of DSN 159 (or equivalent basic knowledge of SketchUp software).

### **DSN 355 - Intermediate Photoshop for Interior Design (5)**

Create and edit interior images, drawings and renderings using Photoshop software. Students will build upon skills learned in earlier course work with the goal of increasing knowledge of Photoshop capabilities and quality of work.

Prerequisite: Successful completion of DSN 159 (or equivalent basic knowledge of Photoshop software).

### **DSN 360 - Independent Study (5)**

Further develop an area of study or technical skill to help you reach your personal career goals in interior design. Upon approval of a topic, students will work with faculty to develop a course plan, objectives, and identify deliverables for evaluation.

Prerequisite: Basic competency with computers.

### **DSN 410 - Design Studio I (5)**

Combine knowledge and skills learned throughout your design education and experience to develop a functional design solution for a given project. Students will be presented with an introduction to human-centered design which will then be applied to their work. Projects will be presented in a written report and a visual and oral presentation.

Prerequisite: DSN 146 - Concept Development and Ideation, DSN 155 - Design Communication III, DSN 212 - Lighting, DSN 230 - Materials, Furnishings and Specifications II, DSN 235 - Interior Planning II.

### **DSN 412 - Design Studio II (5)**

Combine knowledge and skills learned throughout your design education and experience to develop a functional design solution for a given project. Students will be presented with an introduction to evidence-based design which will be applied to their work. Projects will be presented in a written report and a visual and oral presentation.

Prerequisite: DSN 146 - Concept Development and Ideation, DSN 155 - Design Communication III, DSN 212 - Lighting, DSN 230 - Materials, Furnishings and Specifications II, DSN 235 - Interior Planning II.

### **DSN 414 - Design Studio III (5)**

Combine knowledge and skills learned throughout your design education and experience to develop a functional design solution for a given project. Students will be presented with an introduction to global context considerations in design which will then be applied to their work. Projects will be presented in a written report and a visual and oral presentation.

Prerequisite: DSN 146 - Concept Development and Ideation, DSN 155 - Design Communication III, DSN 212 - Lighting, DSN 230 - Materials, Furnishings and Specifications II, DSN 235 - Interior Planning II.

### **DSN 416 - Design Research (5)**

Research a chosen design topic for increased scholarly knowledge and application to the final studio course (Design Studio IV) and the Capstone Project. Students will learn about research methods such as conducting literature reviews, observations, interviews, surveys, and document reviews, then analyze and develop a summary of findings.

Prerequisite: DSN 146 - Concept Development and Ideation.

### **DSN 418 - Design Studio IV (5)**

Combine knowledge and skills learned throughout your design education and experience to an interior design project with a focus relevant to design research conducted in DSN 416. Students will consider the project site and apply research and other collected programming information to schematics in order to develop a design concept for their Capstone Project.

Prerequisite: DSN 155 - Design Communication III, DSN 212 - Lighting, DSN 230 - Materials, Furnishings and Specifications II, DSN 235 - Interior Planning II, DSN 416 - Design Research.

### **DSN 420 - Internship (5)**

Experience the interior design industry by procuring and participating in an internship. Students will work with their internship sponsor to develop a schedule in order to complete a minimum of 120 hours of internship work within the quarter.

Prerequisite: Successful completion of PHIL 310.

### **DSN 422 - Capstone Project (5)**

Fully develop a design project based on research work from DSN 416 Design Research, and programming, schematic and conceptual work completed in DSN 418 Design Studio IV. This self-directed special capstone project will illustrate the culmination of your education and experience, and include creating contract documents and presentation materials, for a final written, visual and oral presentation to students, faculty, and industry members.

Prerequisite: Successful completion of DSN 416 and DSN 418.

## **ECE - Early Care & Education**

### **ECE 126 - Nature and the Outdoor Classroom (2)**

The focus of this course is to gain skills and knowledge

of the components of an outdoor classroom. Ways to incorporate creativity while supporting young children as they explore nature in the environment, as well as sustainable practices for young children will be examined.

Prerequisite: None. Corequisite: None.

### **ECE 195 - Practicum Specialization: Emotionally Intelligent Child (3)**

Course explores fostering emotional intelligence in children, including best practices, building trust, creating curriculum materials and individualized lesson plans and class room environment.

Prerequisite: None. Corequisite: None.

### **ECE 217 - Practicum Specialization: Infant/Toddler (3)**

Provides the student with the opportunity for practical field experience with an "Infant/Toddler" specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

### **ECE 220 - Practicum Specialization: Responsive Caregiving for Infants & Toddlers (3)**

Course explores responsive caregiving for infants and toddlers, including best practices, building trust, environments, creating lesson plans, theories of development, and collaborating with families.

Prerequisite: None. Corequisite: None.

### **ECE 230 - Inclusion In Ece (3)**

Introduction to including children with special needs in the ECE field.

Description from Course Outline:

**Learn to include young children with special needs in the Early Childhood Education field. Course will also explore positive guidance techniques and strategies for working with children with special needs in the ECE classroom.**

### **ECE 231 - Practicum Specialization: School Age (3)**

Provides the student with the opportunity for practical field experience with a School Age specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

**ECE 245DIV - Diversity Awareness & Curriculum Development (3)**

Exploring our own cultural awareness supports our work with diverse populations and is paramount to planning for and interacting with young children and their families. In this course, you will explore the various aspects of bias to develop strategies and an anti-bias approach within the early childhood curriculum.

**ECE 286 - Practicum Specialization: Leadership (3)**

Provides the student with the opportunity for practical field experience with a Leadership specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

**ECE 287 - Practicum Specialization: Child Development (3)**

Provides the student with the opportunity for practical field experience with a Child Development specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

**ECE 288 - Practicum Specialization: Family Child Care Professional (3)**

Provides the student will the opportunity for a practical field experience with a Family Childcare specialization includes a seminar component and observations.

Prerequisite: None. Corequisite: None.

**ECE 292 - Theories of Child Development (3)**

Students will explore child development theories and their application to the education of young children. From this exploration, students will begin to formulate their personal philosophy of teaching practices.

Prerequisite: None. Corequisite: None.

**ECE 297 - Practicum Specialization: Special Needs (3)**

Provides the student with the opportunity for practical field experience with a "Special Need" specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

**ECE 290CAP - Portfolio Adventure (2)**

Provides students with the opportunity to compile their Early Care and Education degree portfolio. The portfolio adventure is an opportunity for students to establish self-marketing goals in the field and to produce an end-product

that reflects their best practice, passion, and experience to date in the program and field. Students will receive instructor guidance and feedback and will participate in the ECE portfolio review process prior to graduation.

Prerequisite: None. Corequisite: None.

**ECED - Early Care & Education****ECED 100 - Child Care Basics (Stars) (3)**

Designed to meet licensing requirements for early learning teachers and family home child care providers, the STARS 30-hour basics course is recognized in the MERIT system. Topics include child growth/development, cultural competency, community resources, guidance, health/safety/nutrition, and professional practice.

Prerequisite: None.

**ECED 105 - Introduction to Early Childhood Education (5)**

Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals, and programs in action.

Prerequisite: None.

**ECED 107 - Health, Safety & Nutrition (5)**

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources.

Prerequisite: None.

**ECED 120 - Practicum: Nurturing Relationships (2)**

Engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health and safety, promoting growth and development, and creating a culturally responsive environment.

Prerequisite: None.

**ECED 132 - Infants & Toddlers - Nurturing Care (3)**

Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally-appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care.

Prerequisite: None.

### **ECED& 134 - Family Child Care (3)**

Learn the basics of family home childcare program management. Topics include: licensing requirements; business management; relationship building; health, safety, and nutrition; guiding behavior; and promoting growth and development.

### **ECED 139 - Administration of Early Learning Programs (3)**

Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for Washington State licensing and National Association for the Education of Young Children (NAEYC) standard compliance.

Prerequisite: None.

### **ECED 160 - Curriculum Development (5)**

Investigate learning theory, program planning, and tools for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills, and growth in young children.

Prerequisite: None.

### **ECED& 170 - Environments for Young Children (3)**

This class focuses on the adult's role in designing, evaluating and improving indoor and outdoor environments that ensure quality learning, nurturing experiences and optimizes the development of young children.

Prerequisite: None. Corequisite: None.

### **ECED 180 - Language and Literacy Development (3)**

Develop teaching strategies for language acquisition and literacy skill development at each developmental stage (birth through age 8) through the four interrelated areas of speaking, listening, writing, and reading.

Prerequisite: None.

### **ECED 190 - Observation and Assessment (3)**

Collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions and communicating findings.

Prerequisite: None.

## **ECON-Economics**

### **ECON 101 - Principles of Economics (5)**

An overview of both micro and macroeconomics. Topics include: organization and operation of the U.S. economy, including unemployment, inflation, and GDP issues; fiscal and monetary policies; supply and demand; market structures; determination of prices in a market economy; and income distribution.

Prerequisite: Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

### **ECON& 201 - Microeconomics (5)**

Study of scarcity; the allocation of resources; supply and demand; production; market structures; determination of output and prices, with emphasis on a market economy; labor and capital markets; role of government in a market economy; comparative advantage; international trade; and distribution of income.

Prerequisite: Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

### **ECON& 202 - Macroeconomics (5)**

Study of the organization and operation of the U.S. economy, including: unemployment, inflation and GDP issues; the business cycle and long-run growth; national income accounting; aggregate supply and aggregate demand; government spending, taxation, and budget deficit/surplus; fiscal policy; the monetary system and the Federal Reserve Banking System; monetary policy; interest rates; and international trade.

Prerequisite: Appropriate Accuplacer placement score or equivalent or successful completion of MAT 099.

### **ECON 310 - Managerial Economics (5)**

Focuses on forecasting and estimating techniques and on tools used to analyze projects, compare alternatives, and make sound business decisions based on economic principles, such as time value of money, internal rate of return, and cost-benefit ratios.

Prerequisite: Prerequisite(s): Successful completion of ENGL& 101 and MATH& 146.

## **ECS - Early Care & Education**

### **ECS 119 - Computer Essentials for ECE (3)**

Covers the essential computer tools and techniques necessary for the ECE professional. Covers designing

forms, parent newsletters, fliers, brochures, and other materials needed to smoothly run a child care center.

Prerequisite: None. Corequisite: None.

### **ECS 151 - ECE Curriculum: Math, Science & Technology (3)**

Explores the different aspects of early childhood curriculum in math, science, and technology.

Prerequisite: None.

### **ECS 161 - ECE Curriculum Music, Movement, and Creativity (3)**

This course studies art, music, and movement in the context of understanding the creative process appropriate for the development of young children. Exploring different aspects of music, movement, art and drama in the early childhood education curriculum and environment.

Prerequisite: none. Corequisite: none.

### **ECS 178 - Practicum: Environments (5)**

Provides the student with the opportunity for practical field experience with an “Environments” specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

### **ECS 185 - Practicum: Domains of Development (5)**

Provides the student with the opportunity for practical field experience with a “Domains of Development” specialization. Includes a scheduled seminar.

Prerequisite: None. Corequisite: None.

### **ECS 221 - Curriculum & Environments for School Age Programs (3)**

Explore the unique aspects of environments and curriculum that meet the needs of school aged children. Topics include collaboration with children and planning considerations focused on STEAM (Science, Technology, Engineering, Arts, and Math).

Prerequisite: None. Corequisite: None.

### **ECS 235 - Issues & Trends (2)**

Research that covers some of the current issues and trends in the ECE field.

Prerequisite: None.

### **ECS 260 - Curriculum for Family Child Care (2)**

A focus on developmentally appropriate curriculum for children in family child care settings with multiple ages.

### **ECS 266 - Leadership in Early Childhood (4)**

Designed for leaders and potential leaders in the early childhood field. Essential skills for effective leadership will be covered: creating a shared vision, teambuilding, managing change, personal development, communication, conflict management, staff development and empowerment strategies.

Prerequisite: None. Corequisite: None.

### **ECS 277 - Professionalism & Ethics (2)**

Examines NAEYC's Code of Ethical Conduct. Includes determining an Early Childhood professional's responsibilities to children, families, colleagues, and the community, using frameworks for ethical decision-making and exploration of personal and professional growth.

Prerequisite: None. Corequisite: None.

### **ECS 290 - Mentoring In ECE (1)**

Learn fundamental skills needed for early childhood mentors who practice as trainers and coaches. Covers concepts of adult learning, communication, observation, feedback, and conflict resolution.

## **EDUC - Early Care & Education**

### **EDUC 115 - Child Development (5)**

Build a functional understanding of the foundation of child development, from prenatal to early adolescence. Observe and document physical, social, emotional, and cognitive development of children, reflective of cross-cultural and global perspectives.

Prerequisite: None.

### **EDUC 130 - Guiding Behavior (3)**

Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences.

### **EDUC 136 - School Age Care Management (3)**

Students will develop skills to provide developmentally appropriate and culturally relevant activities and care, specifically: preparing the environment, implementing

curriculum, building relationships, guiding academic/social skill development, and community outreach.

Prerequisite: None.

### **EDUC 150 - Child, Family and Community (3)**

Students working with children (ages birth through school age) and their families will learn how to integrate the family and community contexts in which a child develops. Students will learn how to explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication.

Prerequisite: None.

## **EFS - Electrician Low Voltage Fire Security**

### **EFS 105 - AC/DC Electricity: Basic Theory, Fractions & Ohm's Law (7)**

Introduces basic theory of electricity, electrical measurements of circuits, fractions, Ohm's law, decimals, and decimal fractions. Covers formulas in electrical work, positive and negative numbers, exponents, powers of 10, and solving Ohm's law.

Corequisite: EFS 106 and EFS 107, or instructor's permission.

### **EFS 106 - AC/DC Electricity: Series Parallel & Combination Circuits (7)**

Introduces students to voltage, current, resistance, total values, and control of current in a series circuit. Introduction to parallel circuits, current and resistance, and voltage in a parallel circuit.

Corequisite: EFS 105 and EFS 107, or instructor's permission.

### **EFS 107 - AC/DC Electricity: Electrical Power & Power Applications (7)**

Introduces electric power in electric circuits, solving the power formula for current and voltage. Algebra for complex electric circuits. Resistance of wire of different sizes and length, sizing wire for a given load. Instantaneous values, maximum values, and phase angles of an AC sine wave.

Corequisite: EFS 105 and EFS 106, or instructor's permission.

### **EFS 108 - National Electrical Code Print Reading (7)**

Introduces students to practical print reading as it applies to the National Electrical Code.

Corequisite: EFS 109 and EFS 110, or instructor's permission.

### **EFS 109 - National Alarm Installer Training Program (7)**

Introduces students to basic alarm systems through comprehensive lessons, videos, and lesson tests. With final test, students will have a thorough exposure to alarm systems.

Corequisite: EFS 108 and EFS 110, or instructor's permission.

### **EFS 110 - CCTV Application & Design (7)**

Introduces students to basics of closed-circuit television systems design and applications.

Corequisite: EFS 108 and EFS 109, or instructor's permission.

### **EFS 118 - National Electrical Codes (6)**

Introduces National Electrical Codes. Through individual tests, students will be able to research applicable electrical codes.

Corequisite: EFS 119, EFS 121, and EFS 124, or instructor's permission.

### **EFS 119 - National Fire Codes (6)**

Introduces the National Fire Codes. Through individual tests, students will be able to research applicable fire codes.

Corequisite: EFS 118, EFS 121, and EFS 124, or instructor's permission.

### **EFS 121 - CCTV Field Service & Installation (7)**

Introduces basic systems service and installation of closed-circuit television systems. Through individual lessons, students will be exposed to the basics of CCTV field service and installation.

Corequisite: 118, EFS 119, and EFS 124, or instructor's permission.

### **EFS 124 - Washington Administrative Codes (2)**

Introduces students to the Washington Administrative Codes pertaining to industrial safety and to electrical

installations in the state of Washington.

Corequisite: EFS 118, EFS 119, and EFS 121, or instructor's permission.

### **EFS 207 - Addressable Fire SLC Systems/Design (7)**

Introduces Addressable and Intelligent Fire Alarm Systems using Signaling Line Circuits (SLC). Includes comprehensive lessons, lecture, and hands-on practical application and design.

Corequisite: EFS 211, EFS 216, or instructor's permission.

### **EFS 211 - Biometrics Access (7)**

Introduces Biometrics Access Control. Various Biometrics Systems are explored, as well as Computer Programmed Access-Control Systems. Includes comprehensive lessons and lecture, as well as hands-on practical application, installation, and design.

Corequisite: EFS 207, EFS 216, or instructor's permission.

### **EFS 216 - Advanced Voice Evacuation Fire Alarm Systems (7)**

Introduces Advanced Voice Evacuation Fire Alarm Systems as used in high-rise applications. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Corequisite: EFS 207, EFS 211, or instructor's permission.

### **EFS 221 - Fire Codes, NICET, NFPA (7)**

Introduces Fire Codes, AHJ (Authority Having Jurisdiction), NICET (National Institute for Certification of Engineering Technologies), and NFPA (National Fire Protection Association). Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Corequisite: EFS 226, EFS 231, or instructor's permission.

### **EFS 226 - High Security Structured Cabling (7)**

Introduces High Security Structured Cabling in residential and commercial applications. Explores cabling as a total package. Includes most applications of security and low voltage needs. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Corequisite: EFS 221, EFS 231, or instructor's permission.

### **EFS 231CAP - CCTV Digital Network Solutions (7)**

Introduces Closed-Circuit Television (CCTV) Digital Network Solutions. Explores applications that require the

camera to be recorded and viewed digitally or remotely via various networks. Includes comprehensive lessons, lecture, and hands-on practical application, installation, and design.

Corequisite: EFS 221, EFS 226, or instructor's permission.

## **ENGL& - English**

### **ENGL& 101 - English Composition I (5)**

Utilize the writing process to write clearly with consideration of audience, purpose, and tone, using standard grammar and punctuation conventions along with common discourse modes and patterns of organization. Read and process sources using independent and critical thinking skills, following established conventions for incorporating and documenting sources in writing.

Prerequisite: Successful completion of ENG 094 or equivalent, or concurrent enrollment in ENGL& 101 of linked sections. .

### **ENGL& 102 - Composition II (5)**

Continues to develop writing skills practiced in English 101 with an emphasis on writing research and analytical essays. The class uses reading, lecture, discussion and writing assignments to develop information literacy while exploring various genres of writing.

Prerequisite: Successful completion of ENGL& 101.

### **ENGL& 235 - Technical Writing (5)**

Focuses on technical writing skills and projects for industry and professions. Strong emphasis will be placed on principles of good writing and research techniques. Students will use appropriate technology and research to prepare letters, resumes, reports, proposals, newsletters, specifications, and other writing tasks typically required in a technical work setting. Discovery and knowledge of workplace ethics and guidelines as they pertain to writing will be researched, discussed, and used to enhance research. Requires use of technology including, but not limited to, computers, printers, and scanners.

Prerequisite: Successful completion of ENGL& 101.

## **ENG - English**

### **ENG 91 - Basic Reading & Writing (5)**

Introduces and develops basic reading and writing skills. Focus is on writing proper sentences and sound paragraphs that express a main idea clearly and fully with a minimum of errors in sentence structure, punctuation, and spelling.



Coursework emphasizes writing from observation, as well as writing in response to reading. Helps refine reading comprehension and increase vocabulary for college-level reading requirements.

Prerequisite: Appropriate placement score or equivalent.

### **ENG 94 - Advanced Reading & Writing (5)**

Enhances writing ability with emphasis on organization, unity, coherence, and adequate development of short essays. Introduction to various types of paragraphs and essays and review of the rules and conventions of standard written English. Both paper and electronic communication tools will be used.

Prerequisite: Successful completion of ENG 091 or equivalent.

### **ENG 96 - Business English I for AMT Support Course (3)**

Designed to support the development of reading, writing, speaking, and listening skills for AMT students in Business English. Emphasis will be on reviewing English structure, content, and usage explored in ENGL 105, providing additional guidance for students in sentence structure, vocabulary, and reading comprehension as well as an additional component for practicing speaking and listening skills as it relates to business communications.

Corequisite: ENG 105.

### **ENG 97 - Business English II for AMT Support (3)**

Designed to support the continued development of reading, writing, speaking, and listening skills for AMT students in Business English. Emphasis will be on reviewing English structure, content, and usage explored in ENGL 106, providing additional guidance for students in sentence structure, vocabulary, and reading comprehension as well as an additional component for practicing speaking and listening skills as it relates to business communications.

Corequisite: ENG 106.

### **ENG 104 - Business Writing (5)**

Review structure, content, and usage as applied to business correspondence. Emphasis will be placed on writing clear, effective written communication, including memoranda, email, letters, resumes, and feasibility reports. Students will compile a portfolio. Course requires researching and documenting data using electronic databases and the Internet.

Prerequisite: Successful completion of ENG 094 or

equivalent.

### **ENG 105 - Business English I for AMT (3)**

Introduction to Basic English structure, content, and usage as it applies to business documents, manuals, and forms. Emphasis will be placed on vocabulary and reading comprehension of business documents as well as listening and responding to verbal communication with clear and effective communication methods. Course requires researching and documenting data using electronic publications and related business manuals.

Prerequisite: Students will take TOEFL or IELTS test in their country and pass with the required scores for admission to be allowed into ENG 105. Accuplacer score between 250-259 or placement into ENG 094 is required for all other International students. Corequisite: ENG 96.

### **ENG 106 - Business English II for AMT (3)**

Review and expand upon knowledge of English structure, content, and usage as it applies to spoken and written communication scenarios in aerospace and manufacturing and related business fields. Emphasis on technical reading comprehension using business documents and verbal communication with coworkers and supervisors. Written communication skills will also include writing resumes, cover letters, and required reports as it applies to aerospace and manufacturing. Course requires researching and documenting data using electronic publications and related business manuals.

Prerequisite: successful completion of ENG 105.

Corequisite: ENG 97.

### **ENG 310 - Business Communications (5)**

Focuses on audience-oriented communication in the business environment. Course content includes writing reports, proposals, memoranda, and emails; graphical presentation of data using Excel; and developing and delivering presentations using PowerPoint and other visual aids.

Prerequisite: Successful completion of ENGL& 101.

## **ENGSI - English Supplemental Instruction**

### **ENGSI 101 - English 101 Supplemental Instruction (3)**

This course is a co-requisite and intended for students whose writing placement indicates the need for additional instructional support to be successful in college-level writing. ENGSI 101 requires concurrent enrollment in a

linked section of ENGL& 101 and provides intensive instruction, workshopping, and programming that supports students' development as writers and learners.

Prerequisite: Successful completion of ENG 091 or equivalent placement. . Corequisite: Designated, linked section of ENGL& 101.

## ENV - Environmental Sciences & Technology

### ENV 108 - Introduction to Ecology (5)

Covers the basic topics of ecology, including population biology, plant and animal species characterization, habitat restoration, nutrient cycling, and energy flow.

### ENV 131 - Hazardous Waste Site Operations - 40 Hours (4)

Provides 40 hours of instruction and mandated training in hazardous materials, personal protection, and safety, in compliance with Occupational Safety and Health Administration (29 CFR 1910.120 HAZWOPER) for hazardous waste site operations. Training shall include theory and application of incident management/command structures, response operation, toxicology, and planning, in addition to the statutory requirements. Mandatory attendance required to receive certificate.

### ENV 135 - Hazardous Waste Site Operations (8)

Training provided in accordance with 29 CFR 1910.120 HAZWOPER Standard and WAC 296-843-20010. Training includes theory and application of incident management/command structures, response operation, toxicology, and planning, in addition to statutory requirements. Mandatory attendance required to receive certificate.

### ENV 141 - Orientation to Environmental Science (4)

Course will survey the wide range of duties and career choices available to the environmental technician. Major environmental issues around the world are covered.

Prerequisite: Completion of, or co-enrollment, in English 94 or equivalent placement.

### ENV 154 - Site Characterization (4)

Focuses on providing students with a wide variety of mapping skills necessary for many phases of environment-related investigations. Also will provide hands-on application of established methods for evaluation of water, soil, and air. Biological, chemical, and physical

investigations in accordance with generally accepted methodologies will be studied and conducted. This will be accomplished using hands-on training, with a wide variety of map resources and texts.

### ENV 157 - Environmental Site Assessment (4)

Includes studying potential liability associated with property transfers. Students learn and implement historical research, site investigation, liability assessment, and regulatory assessment.

### ENV 161 - Environmental Law I (5)

Provides an overview of the American legal system and how the branches of government work together to create and enforce laws. Focuses on environmental legislation and case law.

### ENV 164 - General Chemistry with Lab (5)

Provides the basic concepts, principles, and applications of inorganic chemistry germane to the environmental field. Related instruction includes mathematics used in designing, conducting, and interpreting analytical procedures. Laboratory methods, chemical calculations, properties of solutions, and properties of acids and bases are also covered.

Prerequisite: Completion of MAT 094 or higher, or equivalent placement.

### ENV 165 - Environmental Chemistry with Lab (5)

Continuation of ENV 164 General Chemistry with progressive instruction in laboratory methods; chemical calculations; properties of solutions, acids and bases; and an introduction to organic chemistry.

Prerequisite: Completion of ENV 164 or CHEM& 161 General Chemistry with Lab.

### ENV 230 - Rural Technologies (4)

Explores potential job areas in which students might seek employment. The "rural" aspect examines agriculture, forestry, fish, and wildlife.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165. Corequisite: None.

### ENV 231 - Issues in the Urban Environment (5)

Course explores a variety of urban environmental issues. Storm-water management, sewage treatment, drinking-water treatment, and waste disposal.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

### **ENV 240CAP - Internship (10)**

All students finishing the Associate of Applied Technology (AAT) degree program are required to complete an internship. This is temporary full time field experience in the public or private sector where the student gains skills and experience in a chosen area of employment. Students learn “on the job” as well as making a skilled contribution to the internship provider. Opportunities to find internships are provided but the student is in charge of finding his/her own internship.

Prerequisite: Successful completion of at least 25 credits of ENV 200-level courses or instructor's permission.

Corequisite: Enrollment in ENV 246 required.

### **ENV 245CL - Environmental Law II (5)**

Places an emphasis on correct, accurate interpretation of environmental regulations and their applications. Students will be able to research, interpret, and use a variety of regulations upon completion. Regulations include RCRA; CERCLA; CWA; Washington Drinking Water Rules; Washington State Water Quality regulations; SDWA; and other applicable state, federal and local regulations. Course also covers Federal Energy Policy, including development of fossil fuels and alternative energy sources.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

### **ENV 246CAP - Environmental Science Capstone (2)**

Accompanies ENV 240 Internship. The Capstone Project integrates the CPTC core abilities with the internship and identification of how core abilities apply in the workforce.

Prerequisite: Successful completion of at least 25 credits of ENV 200-level courses or instructor's permission.

Corequisite: Enrollment in ENV 240 required.

### **ENV 248 - Hydrology (6)**

Course covers the basic principles of applied surface water hydrology, ground water hydrology, and water quality. Emphasis is placed on a watershed-based approach that uses water quality standards to regulate surface water quality. Concepts and principles of biologically-based water quality standards are also introduced. The occurrence, movement, and quality of water beneath the earth's surface, aquifers, well-testing methods, and sampling techniques are also covered.

Prerequisite: Successful completion of GEOL& 110 and all

ENV 100-level courses, except ENV 135 and ENV 165.

### **ENV 250 - Introduction to Air Pollution (3)**

Provides a basic knowledge of the sources, mechanisms, and health effects of noise and atmospheric air pollution and their interaction with the weather and other climatological conditions. Methods of regulatory-required air monitoring, sampling, and data interpretation will also be introduced.

### **ENV 251 - Environmental Critical Areas (7)**

Covers environmental critical areas, including wetlands, wildlife conservation areas, aquifer recharge areas, flood hazard, and landslide areas. Focus is on wetland delineation and reporting. Appropriate sections of federal, state, and local regulations are addressed. Includes field trips to local sites and delineation projects on the campus wetland. Field trips are to local sites. Delineation project on the campus wetland will be completed.

### **ENV 260 - Introduction to Soils (5)**

Course focuses on basic physical, biological, and chemical concepts of soil science. Written assignments and practical exercises will be utilized to demonstrate how soils data is commonly used in regulatory, legal, and scientific land use interpretations and decisions.

Prerequisite: Successful completion of GEOL& 110 and all ENV 100-level courses, except ENV 135 and ENV 165.

### **ENV 261 - Watershed Analysis (4)**

Focuses on issues associated with Timber, Fish, and Wildlife watershed analysis. Study various modules and make an in-depth presentation to the class using visual aids. Monitoring and analysis skills will be covered and demonstrated through the collection of field data in remote areas. Willingness to be outdoors in rough terrain is a consideration. EPA Watershed Academy training is included.

Prerequisite: Successful completion of GEOL&110 and all ENV 100-level courses, except ENV 135 and ENV 165.

### **ENV 270 - Hazardous Materials Transportation (3)**

Covers the requirements associated with transportation of hazardous materials as defined in Title 49 Code of Federal Regulations (49CFR) and 171.8 (not including radioactive). Meets the hazmat employee training requirements found in 49 CFR 172 Subpart H.

### **ENV 320 - Applications in Environmental Sciences I (5)**

Students will learn to utilize ecological principles and

concepts to solve real-world issues and provide recommendations for management of natural resources based in science.

This course will introduce you to the fields of mammalogy, ornithology, herpetology, ichthyology, entomology, and botany with applications to environmental management, conservation ecology, and restoration ecology.

Prerequisite: Admission into BAS-ENV Program.  
Corequisite: None.

### **ENV 410 - Applications in Environmental Sciences II (5)**

A continuation of ENV 320 Applications in Environmental Sciences I. This course will apply ecological and chemistry principles and data analyses to examine human impacts on the environment. Students will be introduced to topics of human wildlife conflicts, urban ecology, green stormwater infrastructure, toxicology, analytical chemistry, and chemical instrumentation.

Prerequisite: Completion of ENV 320. Corequisite: None.

### **ENV 420 - Current Issues in Environmental Sciences Seminar (3)**

This course will use peer-reviewed published articles to examine a current issue in environmental sciences. Students will lead group discussions on papers they select related to the current issue.

Prerequisite: BAS-ENV Program Admittance or Instructor Permission. Corequisite: None.

### **ENV 430 - NPDES Permitting (5)**

This course provides the basic regulatory framework and technical considerations supporting the wastewater discharge permit development required under the National Pollutant Discharge Elimination System. This course highlights the development, issuance, and compliance with NPDES permits.

Prerequisite: Completion of ENV 440 Environmental Law.  
Corequisite: None.

### **ENV 440 - Environmental Law (5)**

This course is an overview of the United States' environmental law and policy. We will begin this course looking at our society's different interpretations of what is the environment and how those perceptions were created. The course then covers how our government regulates the environment, focusing on administrative law, case law, and constitutional concerns. Following this, the course focuses

on the major environmental statutes: the Clean Air Act, the Clean Water Act, and the National Environmental Policy Act. We will move onto issues such as waste and natural resources management, including RCRA, CERCLA, and the Endangered Species Act. Included in this course is the role that race, ethnicity, and class play in environmentalism and environmental policy throughout these main topics.

Prerequisite: BAS-ENV admittance or Instructor Permission. Corequisite: none.

### **ENV 450 - Internship (7)**

Experience the environmental science industry by procuring and participating in an internship. Students will work with their internship sponsor to develop learning objectives utilizing the skills and knowledge learned in the environmental science program. Requires a minimum of 150 hours of internship work within the quarter.

Prerequisite: Senior standing or instructor permission.  
Corequisite: None.

## **ES - Esthetic Sciences**

### **ES 100 - Clinical Applications 1 (7)**

Realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 170, ES 172, ES 174, ES 176, and ES 178. Corequisite: ES 180, ES 182, and ES 184.

### **ES 160 - Beauty Basics (6)**

Entry level application of lash enhancements, to include but not limited to; lash and brow tinting, lash extensions, lash lifting, brow lamination and safe and sanitary practices of makeup application. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Attendance of Program Orientation.  
Corequisite: ES 162, ES 164, ES 166, and ES 168.

### **ES 162 - Diseases & Disorders of the Skin (3)**

Identify normal skin and anomalies of skin to include primary, secondary, and vascular lesions, as well as irregularities of skin pigmentation. Identification of skin diseases and how they differentiate from common non-contagious lesions is included. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Attendance of Program Orientation.  
Corequisite: ES 160, ES 164, ES 166, and ES 168.

### **ES 164 - Histology & Physiology of the Skin (3)**

Histology to include a comprehensive understanding of the skin and all its components. Skin physiology to include thorough explanation of the functions of the skin and how it relates to the practice of Esthetics.

Prerequisite: Attendance of Program Orientation.  
Corequisite: ES 160, ES 162, ES 166, and ES 168.

### **ES 166 - Salon Safety & Sanitation (2)**

Overview of pathological and non-pathological microorganisms to include bacteria, viruses, fungi and their transmission. Levels of decontaminations pertaining to salon, spa and medical offices. Cleaning and disinfecting of individual work stations, individual equipment and tools and proper use and storage of linens. Safety including proper use and storage of chemicals, implements and electrical appliances. Includes First Aid/CPR and Blood Borne Pathogen training.

Prerequisite: Attendance of Program Orientation.  
Corequisite: ES 160, ES 162, ES 164, and ES 168.

### **ES 168 - Temporary Hair Removal (4)**

Survey of Temporary hair removal to include: indications, contraindications, methods of epilation using multiple modalities including tweezing, hard wax, soft wax, and sugaring as well as theory of tape, chemicals, creams and lotions, threading, mechanical and electrical apparatus and appliances. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Attendance of Program Orientation.  
Corequisite: ES 160, ES 162, ES 164, and ES 166.

### **ES 170 - Anatomy & Physiology for Estheticians (3)**

Fundamentals of Anatomy and Physiology for estheticians as it relates to the integumentary system and esthetics.

Prerequisite: Successful completion of ES 160, ES 162, ES 164, ES 166, and ES 168. Corequisite: ES 172, ES 174, ES 176, and ES 178.

### **ES 172 - Basic Body Treatments (2)**

Basic application of dry room spa body treatments to include wraps, scrubs, body exfoliation, masks and back treatments. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 160, ES 162, ES

164, ES 166, and ES 168. Corequisite: ES 170, ES 174, ES 176, and ES 178.

### **ES 174 - Basic Cosmetic Chemistry (3)**

Introduction to skin care products, chemistry, chemical compounds, ingredient terms and ingredient selection including regulations, laws and product safety.

Prerequisite: Successful completion of ES 160, ES 162, ES 164, ES 166, and ES 168. Corequisite: ES 170, ES 172, ES 176, and ES 178.

### **ES 176 - Facial Procedures (8)**

European Facial procedures to include: setup, client intake, contraindications/indications, product selection, record keeping, treatment room clean up, aftercare advice, homecare advice, product selection, supply use, equipment use and maintenance. Skin care including but not limited to: key steps to a European facial service, compresses, massage, exfoliation and masks. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 160, ES 162, ES 164, ES 166, and ES 168. Corequisite: ES 172, ES 174, ES 170, and ES 178.

### **ES 178 - Herbal & Aromatherapy for Skin Care (2)**

Introduction to herbal and aromatherapy for skin care. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 160, ES 162, ES 164, ES 166, and ES 168. Corequisite: ES 172, ES 174, ES 176, and ES 170.

### **ES 180 - Basic Exfoliation (5)**

Safe and effective clinical exfoliation utilizing chemical and mechanical techniques such as superficial chemical peels and microdermabrasion. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 170, ES 172, ES 174, ES 176, and ES 178. Corequisite: ES 182, ES 100, and ES 184.

### **ES 182 - Career Development & Business Practices (2)**

This course introduces the student to but not limited to, development of resume and cover letter, interviewing skills to gain employment and business planning for the novice entrepreneurship.

Prerequisite: Successful completion of ES 170, ES 172, ES 174, ES 176, and ES 178. Corequisite: ES 180, ES 100,

and ES 184.

#### **ES 184 - Machine Facials (4)**

Includes the indications, contraindications, techniques, use of electrical or mechanical appliances and safety for electrical modalities including but not limited to: galvanic, high frequency and ultrasonic machines. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 170, ES 172, ES 174, ES 176, and ES 178. Corequisite: ES 180, ES 182, and ES 100.

#### **ES 185 - State Board Prep 1 (2)**

This course includes kit preparation and simulation of state board examinations for the basic esthetic written and practical exam. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 170, ES 172, ES 174, ES 176, and ES 178. Corequisite: ES 180, ES 182, ES 100, and ES 184.

#### **ES 200 - Clinical Applications 2 (9)**

Realistic training in our student-run clinic. Hands on practice of advanced modalities including manual lymphatic drainage, LED, microneedling, dermaplaning, microcurrent and advanced facial massage. Includes all related safety, sanitation and first aid as it relates to advanced esthetics.

Prerequisite: Successful completion of ES 180, ES 182, ES 100, and ES 184. Corequisite: ES 272, ES 280, and ES 250.

#### **ES 203 - Clinical Applications 3 (8)**

Realistic training in our student-run clinic, incorporating every aspect of an exemplar esthetics practice and modalities acquired in Clinical 1 & 2 applications and continued hands on practice of advanced modalities.

Prerequisite: Successful completion of ES 272, ES 280, ES 200, and ES 250. Corequisite: ES 274, ES 285, and ES 260.

#### **ES 214 - Clinical Applications 4 (10)**

Realistic training in our student-run clinic, incorporating every aspect and modalities acquired in Clinical Applications 2. Includes all related safety, sanitation and first aid as it relates to advanced esthetics. Continued hands on practice of advanced modalities, theory of

advanced diseases and disorders of the skin, recapture of anatomy and physiology as it relates to advanced esthetics. Career and business planning for employability or entrepreneurship.

Prerequisite: Successful completion of ES 272, ES 280, ES 200, and ES 250. Corequisite: ES 260, ES 274, and ES 286.

#### **ES 250 - Medical Terminology for Estheticians (2)**

Advanced client assessment, documentation, common medical charting notations and terminology as it relates to esthetics in a clinical spa environment.

Prerequisite: Successful completion of ES 180, ES 182, ES 100, and ES 184. Corequisite: ES 272, ES 280, and ES 200.

#### **ES 260 - Laser Concepts (3)**

Theory of multiple laser and light therapy modalities including: laser, light frequency, radio frequency, ultrasound and plasma practices. Includes theory of all related safety, sanitation and first aid as it relates to advanced esthetics.

Prerequisite: Successful completion of ES 272, ES 280, ES 200, and ES 250. Corequisite: The corequisite courses differ in Master ES Degree and Master ES Certificate routes. For the degree route, the corequisites are ES 203, ES 274, and ES 285. For the certificate route, the corequisites are ES 214, ES 274, and ES 286.

#### **ES 272 - Advanced Body Treatments (3)**

This course includes advanced modalities of skin care to include, but not limited to, manual lymphatic drainage, LED, hot and cold stone therapy, Ayurvedic practices, Vichy shower and cellulite reduction therapy

Prerequisite: Successful completion of ES 180, ES 182, ES 100, and ES 184. Corequisite: ES 280, ES 200, and ES 250.

#### **ES 274 - Advanced Cosmetic Chemistry (3)**

Advanced study of cosmetic ingredients and their categories. Introduction to advance concepts of new ingredients, products and technologies as they pertain to esthetics.

Prerequisite: Successful completion of ES 272, ES 280, ES 200, and ES 250. Corequisite: The corequisite courses differ in Master ES Degree and Master ES Certificate

routes. For the degree route, the corequisites are ES 203, ES 260, and ES 285. For the certificate route, the corequisites are ES 214, ES 260, and ES 286.

#### **ES 280 - Advanced Exfoliation (4)**

Safe and effective advanced exfoliation techniques utilizing, but not limited to, dermaplaning, microneedling, and medium depth peels.

Prerequisite: Successful completion of ES 180, ES 182, ES 100, and ES 184. Corequisite: ES 272, ES 200, and ES 250.

#### **ES 285 - State Board Prep 2 (4)**

This course includes kit preparation and simulation of state boards for both the esthetics and advanced esthetics written and practical exams. Includes all related safety, sanitation and first aid as it relates to esthetics.

Prerequisite: Successful completion of ES 272, ES 280, ES 200, and ES 250. Corequisite: ES 274, ES 203, and ES 260.

#### **ES 286 - State Board Prep 3 (2)**

This course includes kit preparation and simulation of state boards for the advanced esthetics written and practical exams only. Includes all related safety, sanitation and first aid as it relates to advanced esthetics.

Prerequisite: Successful completion of ES 272, ES 280, ES 200, and ES 250. Corequisite: ES 214, ES 274, and ES 260.

## **FAUT - Automotive Technician**

#### **FAUT 120 - Ford Introduction to Automotive (2)**

Students will be preparing for working in a shop environment by covering HAZMAT issues, equipment safety and operation, hand tool selection and use, and service information selection and use. Students will also become familiar with employment opportunities and expectations and certification requirements.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: Concurrent enrollment in FAUT 149, FAUT 179 and FAUT 172 required.

#### **FAUT 144 - Ford Basic Electrical Systems Diagnosis and Testing (6)**

Diagnose and repair automotive electrical systems using the Symptom-to-System-to-Component-to-Cause process. Use special tools and service equipment associated with electrical diagnosis and repair. Use all service publications in their available formats to obtain needed information for diagnosis. Perform diagnosis test procedures. Perform repair procedures. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 209 and FAUT 212.

#### **FAUT 147 - Ford Automotive Brakes (6)**

Covers brake system theory and operation, diagnostic strategies, and component removal/reinstallation. Students will become familiar with the tools, terminology, and procedures used during routine brake service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list. (See syllabus).

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 157, FAUT 185, and FAUT 255.

#### **FAUT 149 - Ford Automotive Suspension, Steering, & Wheel Alignment (7)**

Students will learn suspension and steering principles, diagnostic strategies, and component removal/reinstallation. Alignment geometry and service procedures are also covered. Students will become familiar with the tools, terminology, and procedures used during routine brake service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list (see syllabus).

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 120, FAUT 172, and FAUT 179.

**FAUT 157 - Ford Automotive Brakes, Suspension, Steering, & Alignment Lab (5)**

Provides students with the opportunity to practice the skills covered in FAUT 147 and FAUT 149. Students will become familiar with the tools, terminology, and procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 147, FAUT 185, and FAUT 255.

**FAUT 172 - Ford Base Steering, Suspension, & Alignment (6)**

Students will learn suspension and steering principles, alignment geometry, and service procedures to diagnose and correct excessive tire wear and pull concerns. Students will perform suspension adjustments using an alignment machine; perform power steering service and tests; correctly inspect steering and suspension system components; and flush, fill and inspect power steering systems. Students will become familiar with the tools, terminology, and procedures used during common steering and suspension service operations and will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Students must have required textbooks and tools prior to entering this course. Students must have a valid driver's license per the Ford MLR agreement. Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: Concurrent enrollment in FAUT 147, FAUT 185, and FAUT 255 is required. Additional courses listed on Course Outline FAUT 120, FAUT 149, FAUT 179.

**FAUT 179 - Ford General Maintenance & Tires (7)**

Topics covered include shop safety practices, general automotive maintenance, vehicle checkups, and multi-point inspections. Students will perform scheduled maintenance on items such as fluid and filter changes and learn wheel and tire service procedures. Students will use all available service publications to identify automotive systems and components and become familiar with the tools, terminology, and procedures used during routine maintenance, inspections, and wheel and tire service. Students will have the opportunity to practice the

procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 120, FAUT 149, and FAUT 179.

**FAUT 185 - Ford Brake Systems Diagnosis (2)**

Topics covered include brake system diagnosis and testing and brake system service. Students will diagnose brake concerns using all available service publications. Identify brake system components and perform brake system inspections, machine rotors using an on-car lathe, and become familiar with the tools, terminology, and procedures used during routine brake service operations. Students will have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 120, FAUT 149, and FAUT 172.

**FAUT 209 - Ford Electronic Systems (7)**

Diagnose and repair automotive electronic systems and basic application of computerized electronic systems. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 144 and FAUT 212.

**FAUT 212 - Ford Electrical Systems (9)**

Diagnosis, repair, and basic application of automotive electrical systems. Students will become familiar with the tools, terminology, basic theory, diagnostics, removal, and installation procedures used during common service operations and have the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT



144 and FAUT 209.

### **FAUT 255 - Ford Air-Conditioning, Heating & Ventilation (6)**

Provides students with theory, troubleshooting, and repair of automotive air-conditioning systems, heating systems, and ventilation systems. Also covers recovery and recycling of both R-12 and R-134A refrigerants and procedures used during common service operations and gives students the opportunity to practice procedures identified as priority tasks in the NATEF (ASE) task list.

Prerequisite: Successful completions of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Instructor's permission required. Corequisite: FAUT 147, FAUT 157 and FAUT 185.

## **GEO - Environmental Sciences & Technology**

### **GEO 215 - GPS Technologies (2)**

Covers the use of global positioning system equipment to create maps and files for use in ArcGIS (geographic information system). Focuses on Trimble GPS technologies. Covers analysis tools and layout features for map creation in ArcGIS.

### **GEO 310 - GIS Technologies (2)**

This course builds upon concepts learned in GEO 215 GPS Technologies. Covers advanced topics in geographic information systems (GIS). Focuses on becoming proficient in tools in ArcGIS relevant to environmental sciences. Covers creating files and maps and performing spatial analyses.

Prerequisite: BAS-ENV admittance or Instructor permission. Corequisite: None.

## **GEOL - Geology**

### **GEOL& 110 - Environmental Geology with Lab (5)**

Focuses on the geological impacts associated with human activities. Emphasis includes internal and surface processes and the basic formation of the earth. Also covers conflicts associated with resource development and human responses to natural hazards.

## **GTC - Graphic Design Technology**

### **GTC 120 - Computer Operations & Image Management for Graphic Professionals (4)**

Introduction to computer operations and file management. Covers image acquisition, formats, usage, and archiving.

### **GTC 125 - Introduction to the Principles and Elements of Design (4)**

Introduction to visual arts and design principles. Stresses the components of visual thinking and visual language underlying design for digital media. A series of case studies and exercises applying the design process and use of basic elements of design, typography, images, color, and layout using textbooks, EBook, page layout programs, and tutorials.

### **GTC 132 - Digital Imaging I (4)**

Introduces the fundamentals of Photoshop to include: basic tools, image editing, painting, color correction and the creation, use, and management of layers and channels.

### **GTC 137 - Electronic Publishing & Layout (4)**

Apply typographic terms, vocabulary, and concepts; examine type identification and explore the relationships or essence of typographic design. Apply and solve mathematical problems common to typography. Apply basic page layout and create files. Explore proofreading and correcting copy changes.

### **GTC 145 - Prepress I (4)**

Students will create, edit and manipulate PDF files, combine files into PDF presentations, and to secure PDF documents. They will also work with many of the advanced features of Adobe Acrobat to include; OCR text recognition, preflight, print production tasks, touch up and commenting, proofing and collaboration.

Prerequisite: GTC 120 - Computer Operations & Image Management for Graphic Professionals.

### **GTC 160 - Intro to Vector-Based Illustration Software (4)**

Vector-based software, tools, and features will be used to create text and logos, apply image effects and design web graphics. The course incorporates branding and identifiers when designing products and enables students to design for both print and web.

### **GTC 165 - InDesign I (4)**

Perform techniques of the application of InDesign on the

Macintosh or PC based computer. Create files for electronic output; create documents, using style sheets, color/swatches, tabs, along with understanding color separations for creating a variety of projects such as menus, booklets, brochures, forms, and other documents. Explore pdf and postscript files, service bureaus and production speed.

Prerequisite: GTC 137 - Electronic Publishing & Layout OR instructor approval.

#### **GTC 170 - Digital Imaging II (4)**

Builds on the fundamentals of Photoshop and introduces advanced imagery to include blending, advanced layers, advanced selections, vector tools, filters and color correction.

Prerequisite: GTC 132 - Digital Imaging I OR instructor approval.

#### **GTC 203 - Preflight (5)**

Explore the prepress environment using page layout, vector object-oriented and imaging software applications. Creating projects in color for collect for output and packaging of files. Use Acrobat Professional to create and Distill PDF files, edit files, transfer files, and create electronic portfolio. Perform electronic and laser separations for digital output, creating Postscript and EPS files, for graphic manipulation.

Prerequisite: GTC 145 - Prepress I, GTC 209 - Advanced Vector Digital Illustration, and GTC 276, - InDesign II OR instructor's approval.

#### **GTC 209 - Advanced Vector Digital Illustration (5)**

Perform advanced techniques using Adobe Illustrator, create documents using Color Swatches and color separations for a variety of projects. Explore the abilities of different tools/Panels, Effects and filters. Integrate Adobe Acrobat Pro as soft proofing software from within Illustrator and prepare files for electronic output ready for a service provider.

Prerequisite: GTC 160 - Intro to Vector-Based Illustration Software.

#### **GTC 210 - Digital Imaging III (5)**

Combine multiple images into a single design, manipulate existing photos, create entirely new digital artwork from scratch and more. Adobe Photoshop is one of the most universal and powerful tools in the professional graphic design arsenal. The projects in this course were designed to reflect a variety of assignments that you might encounter in

your graphic design career.

Prerequisite: GTC 170 - Digital Imaging II OR Instructor approval.

#### **GTC 220 - User Experience Design for the Web (4)**

This course will cover the foundations of User Experience Design (UXD) for web-based applications. UXD topics covered in this course include: UX heuristics, accessible design, information architecture, user testing methods, user personas, user journey mapping, wireframing, and prototyping.

#### **GTC 223 - Prepress II (5)**

Advanced prepress production topics are covered through lecture, research and practice. Topics include: fonts, postscript, Acrobat and RIP (raster image processing). Students will produce a press ready package through the use of the Adobe suite, postscript and raster image processing.

Prerequisite: GTC 145 - Prepress I OR instructor's approval.

#### **GTC 225 - Advanced Page Layout Principles (5)**

Apply Layout techniques using industry standard software to produce files for output. Preflight and Package Press Ready files. Output Composite and Separations to Postscript. Impose jobs for output service provider.

Prerequisite: GTC 145 - Prepress I, GTC 209 - Advanced Vector Digital Illustration, and GTC 276 - InDesign II, OR instructor's approval.

#### **GTC 230 - Intro to Programming for the Web (4)**

This course provides an introduction to programming for web-based applications. Programming topics covered in this course include: a history of the internet, cloud server administration, HTML structures, CSS styling, responsive application design and development, debugging and validation of code.

Prerequisite: GTC 220 User Experience Design for the Web.

#### **GTC 235 - Print Production and Branding (5)**

Explore the impact paper has on Design and Branding. Produce a comprehensive Branding package, from research to print ready package. Present Branding package to the class.

Prerequisite: GTC 223 - Prepress II.

### **GTC 240 - Advanced Programming for the Web (4)**

This course will build off of the programming fundamentals covered in GTC 230 Intro to Programming for the Web. Students will create more complex web-based applications using HTML, CSS, and Javascript. Advance CSS and Javascript techniques will be used to create animation, movement, and object manipulation in assigned projects. Students will also learn how to install, manage, secure, customize, and maintain a Content Management System (CMS).

Prerequisite: GTC 230 - Intro to Programming for the Web.

### **GTC 254 - Capstone Class (5)**

Preparation of personal job-hunting package of student's chosen specialty within the graphic technologies program, including industry research, business cards, cover letters, resumes, personal sales pitches, and job hunting portfolio.

Prerequisite: GTC 223 - Prepress II OR instructor's approval.

### **GTC 276 - InDesign II (5)**

Perform advanced techniques with InDesign, create documents and use color separations for a variety of projects, and prepare files for electronic output.

Prerequisite: GTC 165 - InDesign I OR instructor's approval.

### **GTC 278 - Independent Study (4)**

This course explores student competency in the student's specialty skills area of the Graphic Technologies program. Students will produce a capstone project showing work accomplished and skills summarized.

### **GTC 280 - Internship (4)**

Provide on-the-job field experience pertinent to Visual Communications. Apply classroom skills to work-related supervised learning experience. Internships may be paid or non-paid assignments and occur at on- or off- campus locations.

## **HAC - Heating & Air Conditioning Service Technician**

### **HAC 102 - Basic Electricity (5)**

This course discusses the structure of matter, movement, electrons, conductors, insulators, direct and alternating currents, and electrical units of measurement. Students will

also study electrical circuits and measurements, Ohm's law, series and parallel circuits, and electrical power. Also includes magnetic fields, inductance, transformers, capacitance, impedance, sine waves, and use of electrical measuring instruments.

Corequisite: HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### **HAC 105 - Electrical Circuits (4)**

This course discusses types of automatic control devices that respond to thermal change, the bimetal device, control by fluid expansion, the thermocouple, and electronic sensing devices. Covers space temperature controls (both high and low voltage), sensing temperatures of solids, pressure-sensing devices, oil-pressure safety controls, air-pressure controls, devices that control fluid flow, and maintenance of mechanical and electromechanical controls.

Corequisite: HAC 102, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### **HAC 120 - Advanced Controls & Troubleshooting (4)**

This course covers control terminology, applications and electronic control circuits. Pneumatic controls and direct digital controls are also explored, along with programmable thermostats. Also covers procedures for troubleshooting basic and complex circuits, thermostats, and high-voltage circuits controlled by thermostats. Describes procedures for measuring amperage and voltage in low- voltage circuits and discusses pictorial and line diagrams.

Corequisite: HAC 102, HAC 105, HAC 162, HAC 163, HAC 164, and HAC 169, or instructor's permission.

### **HAC 162 - Electric Motors & Their Applications (4)**

This course discusses types of electric motors, along with starting and running components and characteristics, motor speeds, and power supplies. Specific topics also included are single and split-phase motors, the centrifugal switch, electronic relay, capacitor start motors, capacitor run motors, permanent split capacitor motors, shaded pole motors, single-phase hermetic motors, positive temperature coefficient motors, and variable- speed motors. Includes discussions of various characteristics and insulations, bearings, mountings, and motor drives.

Corequisite: HAC 102, HAC 105, HAC 120, HAC 163, HAC 164, and HAC 169, or instructor's permission.

**HAC 163 - Refrigeration Controls (3)**

This course covers fundamentals of refrigeration controls and defrost systems.

Prerequisite: Must have required hand tools of the trade.  
Corequisite: HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169.

**HAC 164 - Electric Motors & Troubleshooting (3)**

This course discusses mechanical and electrical motor troubleshooting. This includes drive assemblies, belt tension, pulley alignment, open and shorted windings, shorts to ground, capacitor problems, wiring and connectors, and troubleshooting hermetic motors.

Corequisite: HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 169 or instructor's permission.

**HAC 169 - Advanced Motor Theory (2)**

In this course, students will develop an understanding of variable-speed and capacity control motors (ECMs, Offloaders, Compressors, Inverter Drives).

Prerequisite: Must have required hand tools of the trade.  
Corequisite: HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, and HAC 164.

**HAC 170 - Heating I (7)**

This course covers controls, thermal physics, electric heating, and equipment for residential and light commercial heating system installation and servicing, with emphasis on electric heating and gas heating.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.  
Corequisite: HAC 175, HAC 181, and HAC 184.

**HAC 175 - Heating I Lab (5)**

This course teaches students to troubleshoot and repair gas-burning appliances. Thermal physics and equipment for heating systems analysis and efficiency are studied. This is a hands-on class utilizing live projects.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.  
Corequisite: HAC 170, HAC 181, and HAC 184.

**HAC 181 - Heating II (6)**

This course covers controls, thermal physics, and equipment for residential and light commercial heating

system installation and servicing with emphasis on electric and gas fuel heating.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.  
Corequisite: HAC 170, HAC 175, and HAC 184.

**HAC 184 - Heating II Lab (4)**

Will teach students to competently troubleshoot and repair electric, gas, and fuel heating equipment; thermal physics, gas safety, and equipment for heating systems analysis and efficiency are studied. This is a hands-on class using live projects.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 163, HAC 164, and HAC 169. Must have required hand tools of the trade.  
Corequisite: HAC 170, HAC 175, and HAC 181.

**HAC 202 - Advanced Refrigeration (10)**

This course covers competently troubleshooting and repair of refrigeration equipment, thermal physics and equipment for refrigeration systems analysis and efficiency. This is a hands-on class utilizing live projects.

Prerequisite: Must have required hand tools of the trade.  
Corequisite: HAC 249 and HAC 257.

**HAC 230 - EPA Refrigerant Certification (1)**

In this course, students will learn to properly recover and charge refrigerants & dispose of them as defined by EPA in order to pass a national examination.

**HAC 237 - Basic Refrigeration I (7)**

Introduction to controls, thermal physics, and equipment for residential and light commercial air conditioning and refrigeration system installation and servicing, with emphasis on refrigeration.

Prerequisite: Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 242, HAC 246, and HAC 255.

**HAC 242 - Basic Refrigeration I Lab (5)**

This course covers troubleshooting and repair of refrigeration equipment, thermal physics, and equipment for refrigeration systems analysis and efficiency. This is a hands-on class utilizing live projects. Students will build a basic capillary tube refrigeration unit using basic

temperature controls.

Prerequisite: Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 237, HAC 246, and HAC 255.

#### **HAC 246 - Basic Refrigeration II (6)**

Introduction to controls, thermal physics, and equipment for residential and light commercial air conditioning and refrigeration system installation and servicing, with emphasis on commercial refrigeration and heat pumps.

Prerequisite: Successfully completed HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 237, HAC 242, and HAC 255.

#### **HAC 249 - Job Readiness (5)**

This course covers resume writing, cover letter preparation, Internet job search, Work Source job readiness workshop, and tips on filling out job applications.

Prerequisite: Must have required hand tools of the trade. Corequisite: HAC 202 and HAC 257.

#### **HAC 255CAP - Basic Refrigeration II Lab (3)**

This course provides students hands-on experience with introduction to controls, thermal physics, and equipment for air-conditioning system installation and servicing.

Prerequisite: Successful completion of HAC 102, HAC 105, HAC 120, HAC 162, HAC 164, and HAC 169 or equivalent, or instructor's permission. Must have required hand tools of the trade. Corequisite: HAC 237, HAC 242, and HAC 246.

#### **HAC 257CAP - Commercial Refrigeration/Advanced Refrigeration (7)**

This course teaches students to troubleshoot and repair commercial refrigeration through study material and DVD format. Refrigeration fundamentals, refrigeration electrical controls, and refrigeration charging are explored. This is a hands-on class utilizing live projects.

Prerequisite: Must have required hand tools of the trade. Corequisite: HAC 202 and HAC 249.

## **HIST - History**

### **HIST& 146 - US History I (5)**

Surveys the history of North America in the colonial era to the Civil War. Emphasis is placed on the establishment of European colonies, relations between colonists and Native Americans, the development of slavery, economic and social developments, the relationship with the British Empire, the Revolutionary War, and emergence of the U.S. as a nation.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

### **HIST& 147 - US History II (5)**

Surveys the history of the U.S. from the Civil War era through World War I. Emphasis is placed on Native American-white relations, slavery, territorial expansion, the Civil War, and economic, social, and political developments leading to World War I.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

### **HIST& 148 - US History III (5)**

Survey of U.S. History from World War II to present. Emphasis is placed on the Cold War Era, Vietnam, Civil Rights, the liberal consensus, the rise of modern conservatism, minority relations, the 1990s, and post-9/11 American society.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

## **HISTO - Medical Histology**

### **HISTO 105 - Orientation to the Histology Laboratory (2)**

Introduces laboratory and chemical safety as well as universal precautions. Covers basic overview of standard Histology instrumentation, quality control procedures, specimen accessioning, record keeping and documentation. Explores laboratory and personnel certification requirements.

Prerequisite: Successful completion of BIOL& 175, or BIOL& 241 and BIOL& 242 Successful completion of CHEM& 110 or CHEM& 121. Corequisite: None.

### **HISTO 110 - Histotechnology I (10)**

Explores the theory and principles of fixation, processing, embedding, sectioning, and cover slipping of tissue

sections.

Prerequisite: Successful completion of BIOL& 175, or BIOL& 241 and BIOL& 242 Successful completion of CHEM& 110 or CHEM& 121. Corequisite: None.

### **HISTO 115 - Histotechnology Lab I (5)**

Explores work in a simulated histology laboratory on campus. Students will participate in hands-on training in basic grossing techniques, as well as in-depth training in processing, embedding, and cutting tissue sections. Students will also learn to identify basic tissue structures using a light microscope.

Prerequisite: Successful completion of BIOL& 175, or BIOL& 241 and BIOL& 242 Successful completion of CHEM& 110 or CHEM& 121. Corequisite: None.

### **HISTO 120 - Histotechnology II (10)**

Covers and expands upon the knowledge and skills learned in Histotechnology I. Students will begin to learn the theory and principles of hematoxylin and eosin staining, as well as the basic principles and procedures of carbohydrate stains and cytology.

Prerequisite: Successful completion of HISTO 105, HISTO 110, and HISTO 115. Corequisite: None.

### **HISTO 125 - Histotechnology Lab II (5)**

Expands upon the knowledge and skills learned in Histotechnology Lab I. Students will continue to increase their skills in embedding and tissue sectioning, including the cutting and staining of frozen tissue specimens. Students will learn to do carbohydrate and Amyloid stains.

Prerequisite: HISTO 105, HISTO 110, HISTO 115.  
Corequisite: None.

### **HISTO 130 - Math Applications for Histology (3)**

Introduces laboratory mathematics, with an emphasis on solution preparation.

Prerequisite: Successful completion of BIOL& 175, or BIOL& 241 and BIOL& 242 Successful completion of CHEM& 110 or CHEM& 121. Corequisite: None.

### **HISTO 135 - Histotechnology III (10)**

Covers theory and techniques learned in Histotechnology I and II. Students will study more complicated special stains, focusing on methods used for microorganisms, pigments, minerals, the nervous system, connective tissue, and muscle stains.

Prerequisite: Successful completion of HISTO 120, HISTO 125, and HISTO 130. Corequisite: None.

### **HISTO 140 - Histotechnology Lab III (5)**

Expands upon the knowledge and techniques learned in Histotechnology Lab I and II. Students will perform more complicated special stains focusing on methods used to demonstrate microorganisms, pigments, and minerals. Students also perform special stains commonly run on brain, muscle, and connective tissue.

Prerequisite: HISTO 120, HISTO 125, HISTO 130.  
Corequisite: None.

### **HISTO 145 - Immunohistochemistry (5)**

Covers basic immunohistochemistry and Enzyme histo-chemistry theory and techniques.

Prerequisite: HISTO 120, HISTO 125, HISTO 130.  
Corequisite: None.

### **HISTO 150CAP - Histology Internship (10)**

Covers the clinical phase of working in an affiliated histology laboratory. The staff of the affiliated laboratory directly supervise students. A report of "No Record On File" related to crimes against persons from the Washington State Patrol is required for participation in this class."

Prerequisite: Successful completion of HISTO 135, HISTO 140, and HISTO 145. Corequisite: None.

### **HISTO 160 - Histology Seminar (5)**

Covers what students have learned while working in an affiliated histology laboratory. Students will also review for their certification exam.

Prerequisite: HISTO 135, HISTO 140, HISTO 145.  
Corequisite: None.

## **HS - Human Services**

### **HS 115 - Therapeutic Communication Skills (5)**

Acquaints students with the basic methods of therapeutic communication. Emphasis is placed on building basic active listening skills. Students will demonstrate mastery of theory through classroom activities, including mock interviews and videotaping.

Prerequisite: Successful completion of ENGL& 101, PSYC& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of C" or

higher."

**HS 120 - Soft Skills for the Human Services Professional (3)**

Designed to prepare students for the internship portion of the program, as well as employment. Students will develop professional résumés, cover letters, and employment preparation materials in line with human services industry standards. Topics include workplace communication skills, including written and oral communication, team building, time and self-management, stress management, and conflict resolution for the workplace. Students will explore the supervisor-supervisee relationship, including the functions of evaluation, self-evaluation, and professional development.

Prerequisite: Successful completion of HS 115, HS 127, and HS 237.

**HS 125 - HIV/AIDS/Blood-Borne Pathogens & Brief Risk Intervention for the Chemically Dependent (1)**

Increase student's knowledge of HIV/AIDS & blood-borne pathogens. Students will gain knowledge of the history of HIV/AIDS and related issues. Provides 10 hours of HIV/AIDS training in the areas of transmission, occupational safety, and standard precautions.

Prerequisite: For Human Services Generalists: Students must be a high school graduate or have passed a high school equivalency test and have COMPASS scores for Reading of 86 and a score for Writing of 77 or higher, or successful completion of ENG 94, and have a Pre-Algebra score of 37 or higher, or successful completion of MAT 60 prior to starting the course. For HSCD certificate students: Completion of a terminal degree (A.A., B.A., M.S., etc.), OR student is entering their fourth quarter of the Human Services Associate's degree program.

**HS 127 - Introduction to Human Services (5)**

Introduces students to human services as a profession and includes a historical and philosophical framework of human service delivery. Contemporary roles and the human service worker will be covered, including: typical duties and tasks of human service workers, income, maintenance, children's services, family services, aging, substance abuse, mental health, services for persons with disabilities, and the sociocultural aspects of providing services in a multiculturally diverse society. Students will also examine the competencies and qualifications required to become an effective human services worker, as well as the occupational and educational alternatives for graduates.

Prerequisite: Successful completion of ENGL& 101,

PSYC& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of C" or higher."

**HS 152 - Internship I (3)**

Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students will perform relevant job duties and tasks within an agency of their choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice.

Prerequisite: Successful completion of HS 120, HS 125, HS 225, and HS 227.

**HS 215 - Human Development for the Human Services Professional (5)**

Human development for the human services professional is a lifespan development course looking at the physical, social, cognitive, and emotional development from conception to death. Cultural dynamics, diversity, and social contexts are examined in their relationship to the developmental process. Implications for parenting, education, case management, and social policy making will be discussed in terms of the application for human services professionals.

Prerequisite: Successful completion of HS 222, HS 230, HS 241, and HS 245.

**HS 222 - Applied Counseling for the Human Services Professional (5)**

Increases student knowledge of a variety of counseling theories, theorists, and techniques, from both a historical and contemporary viewpoint. Students will explore the practical application and appropriate uses of these theories in the human services system.

Prerequisite: Successful completion of HS 152, HS 226, and HS 234.

**HS 225 - Survey of Community Resources (3)**

Introduces students to a variety of community-based human service agencies through examination of their services, functions, and service populations. The class will participate in field visits, guest lectures, and exercises designed to assist them in understanding the relevance of each service component to the whole community, regional, and state system.

Prerequisite: Successful completion of HS 115, HS 127, and HS 237.

**HS 226 - Mental Health Assessment & Evaluation (5)**

Explores current perspectives of mental health in the helping professions by focusing on the identification, definition, diagnostic criteria, and assessment and evaluation of psychological disorders. Emphasizes the continuum between normal and abnormal behavior by examining biological, psychological, and sociocultural causal factors as they relate to adults and children.

Prerequisite: Successful completion of HS 120, HS 125, HS 225, and HS 227.

**HS 227 - Behavioral Health & Wellness (5)**

Introduces students to the dimensions of wellness, including physical, emotional, social, and spiritual components. Students explore strategies for personal behavioral health and wellness, including coping strategies, personal boundaries, self-awareness, and how to avoid burnout on the job.

Prerequisite: Successful completion of HS 115, HS 127, and HS 237.

**HS 230 - Case Management (5)**

This course introduces students to the fundamentals of case management practice. Students will review different models of case management and learn about common case management functions, such as outreach, engagement, assessment, planning, accessing resources, coordination, and advocacy.

Prerequisite: Students must consent to and receive a "No Record on File" report related to Crimes Against Persons. Students must complete the following third quarter Human Services Program courses with a C grade or above: HS 220, HS 227, HS 221, HS 244 to be eligible to take this course.

**HS 237 - Law & Ethics for Human Services (3)**

Presents an overview of the ethical and professional issues that human services workers face in the field. Includes ethical decision making, professional responsibilities, liability, confidentiality, records and rights of clients, professional codes of ethics, core values and personal issues, supervision, leadership, and the legal system.

Prerequisite: Successful completion of ENGL& 101, PSYC& 100, any 100-level Computer Applications class of 3 or more credits, and COLL 102 with a grade of C" or higher."

**HS 238 - Special Projects (3-5)**

Increases students' knowledge and skill by formulating and implementing a special project related to the human services field. Students must obtain authorization from the instructor for the project prior to enrolling in course.

**HS 239 - Selected Topics (3-5)**

Students will be responsible for performing a literature review and/or a research paper on a human services-related topic. Students must obtain authorization from the instructor for the project prior to enrolling in the course.

**HS 240 - Survey of Addiction (5)**

Focuses on addiction in modern society by surveying prevalent addictions and common co-occurring disorders. Students will gain an overview of causal factors and the consequences of addiction as they relate to the individual, family, and community. A strengths-based perspective will focus on the biological, psychological, and sociocultural factors influencing addiction and recovery.

Prerequisite: Successful completion of HS 222, HS 230, HS 241, and HS 245.

**HS 241 - Dynamics of Violence (5)**

Presents an overview of the dynamics of violence in relationship to both the perpetrator and the victim. Areas of emphasis include child neglect, child sexual and physical abuse, missing and exploited children and adolescents, domestic violence, the cycle of violence, elder abuse, and violence's impact on the family system. Strategies for treatment and community intervention are explored.

Prerequisite: Successful completion of HS 152, HS 226, and HS 234.

**HS 234DIV - Culturally Competent Practice (5)**

Provides students with an awareness of the historical, cultural, socioeconomic, biological, and psychosocial influences that define diversity. Examines culturally competent standards that influence best practice standards for human service workers. Students will explore culture, guidelines for culturally sensitive practices, the impact of inequality on a variety of service populations, racism, prejudice, and inclusion strategies.

Prerequisite: Successful completion of HS 120, HS 125, HS 225, and HS 227.

**HS 245 - Internship II (3)**

Students will participate in on-the-job training in the



human services field of their choice. Duties and tasks are supervised. Students perform relevant job duties and tasks within their agency of choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice. Successful completion of Internship I is required.

Prerequisite: Successful completion of HS 152.

### **HS 246 - Group Process (3)**

An introduction to the dynamics of group interaction, with emphasis on the student's firsthand experience as a group leader and member. Highlights the factors involved in problems of communication, effective emotional responses, and personal growth. Emphasizes group process as a means of changing behavior. This course is designed to assist human services students, who will function as group leaders and co-leaders.

Prerequisite: Successful completion of HS 222, HS 230, HS 241, and HS 245.

### **HS 255 - Internship III (3)**

Students will participate in on-the-job training in the human services field of their choice. Duties and tasks are supervised. Students perform relevant job duties and tasks within their agency of choice, attend supervision meetings, identify applicable community resources, and perform other job duties as assigned. Instructor's permission is required for site choice. Successful completion of Internship II is required.

Prerequisite: Successful completion of HS 245.

## **HSCD - Human Services**

### **HSCD 134 - Introduction to Addictions (5)**

Focuses on substance and behavioral addictions in modern society by surveying prevalent addiction trends and common co-occurring disorders. Students will gain an overview of causal factors and the consequences of addiction as they relate to the individual, family, and community. A strengths-based perspective will focus on the biological, psychological, and sociocultural factors influencing addiction and recovery.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 150 - The Neuro-Pharmacology of Addiction (5)**

This course provides an overview of the effects of drug use and chemical dependency on the body, including physiological, emotional, and behavioral implications. Topics include drug interactions, brain-body chemistry, and the management of chronic and acute conditions of drug misuse.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 134.

### **HSCD 155 - Chemical Dependency Counseling I: Individuals & Groups (5)**

This course explores learning in a collaborative process that facilitates the client's progress toward mutually determined treatment goals and objectives. Students will learn counseling competencies that will include sensitivity to the client's individual characteristics and culture, the role of the counselor, approaches to counseling and addiction disorders, use of warmth, respect, genuineness, concreteness and empathy, and the therapeutic use of power and authority. Group dynamics and CD group counseling requirements as per the WAC and RCW will be covered.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 180 - Addictions Treatment: Ethics & the Law (5)**

This course examines the federal and state laws that pertain to chemical dependency for individuals, families, and service agencies, including the relevant WAC and RCW. Students will be introduced to the local criminal, civil, and juvenile court systems. Core topics include the examination and adherence of the ethical standards for chemical dependency professionals in the helping relationship, including implications for clinical supervision and continuing education. Includes ethical decision-making, professional responsibilities, liability, confidentiality, records and rights of clients, professional codes of ethics, core values and personal issues, supervision, leadership, and the legal system.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 215 - Case Management & Recordkeeping for the Chemical Dependency Professional (5)**

This course provides basic chemical dependency case management skills of service coordination, referral practices, community services, ongoing evaluation of treatment progress, client needs, HIV Brief risk intervention for the chemically dependent, and learning documentation standards and applicable laws.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 227 - Chemical Dependency Assessment & Evaluation (3)**

Students will be introduced to a variety of industry-standard screening, evaluation and assessment tools for both adolescents and adults. Students will be able to determine a client's readiness for treatment and change and have an understanding of the appropriate levels of care. ASAM placement and the stages of change will be focal topics.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 229 - Suicide Prevention for the Chemical Dependency Professional (1)**

This course provides an overview of contributing factors to suicidality, including mental health, substance use, and lifespan development. Evidence-based prevention strategies for adolescents, adults, and older adults are discussed, including differentiations between Death with Dignity statutes for the terminally ill.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

### **HSCD 235 - Chemical Dependency Practicum (3)**

Students will work in a supervised chemical dependency agency, as approved by the internship supervisor. Students adhere to ethical and professional responsibilities as per their agency, WAC, RCW, and NAADAC guidelines. The course will provide both individual and group supervision provided by agency and instructional professionals to share experiences and further develop work-related skills. Students will complete 115 hours of supervised clinical experience.

Prerequisite: Completion of a terminal degree associate or

higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 134.

### **HSCD 249 - Chemical Dependency Counseling II: Adolescents & Families (5)**

Acquaints students with culturally competent models of diagnosis and intervention for families and adolescents, as well as building an understanding for the dynamics among family members impacted by chemical dependency. Provides an overview of adolescent psychology and development and family systems theory. Discusses client, family, and community education for substance misuse.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, HS 255, and HSCD 155.

### **HSCD 251 - Relapse Prevention (3)**

Familiarizes students with the basic philosophy and techniques of relapse prevention for substance abuse and the ongoing process that involves all aspects of the person's wellness and culture. Learn to recognize the warnings signs for relapse, the 12-step approach to recovery, and general wellness concepts.

Prerequisite: Completion of a terminal degree associate or higher, or successful completion of HS 222, HS 230, HS 241, and HS 255.

## **HUC - Health Unit Coordinator**

### **HUC 106 - Anatomy & Physiology for Health Unit Coordinator (3)**

Introduces basic word elements used in building medical terminology and identifies the different types of word elements present in each medical term by name. Introduces medical terms, body structure, and pathology in relation to each body system: integumentary, musculoskeletal, sensory, circulatory, nervous, endocrine, and digestive systems.

Prerequisite: Enrollment in HUC 114, HUC 120, must provide evidence of a current CPR card on the first day of enrollment, or by instructor's permission.

### **HUC 108 - Introduction to Health Unit Coordinating (6)**

This course will focus on orientation and introduction to campus policies and rules of conduct. This course will also introduce students to program policies, dress code, attendance, classroom, and workplace rules of conduct, program goals, and grading system. This course also

focuses on the use of various communication devices and introduces the EMR/HER and related Windows programs used in the hospital.

Prerequisite: Must provide evidence of a current CPR card on the first day of enrollment, or by instructor's permission. Enrollment in HUC 106, HUC 114 and HUC 120.

#### **HUC 112 - Unit Coordinator Tasks & Procedures II (4)**

Focuses on cognitive knowledge and performance skills in the computer laboratory. Students will demonstrate performance skills for maintaining medical records, accurately transcribing physicians' orders to the appropriate chart forms and Kardex, as well as completion of pseudo patient charts.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Enrollment in HUC 113 ,HUC 118, HUC 122, HUC 126 and HUC 132.

#### **HUC 113 - Introduction to Communication in the Health Unit Coordinator Role (1)**

Students will learn to describe and use good listening skills as a means of preventing and/ or solving conflicts with a variety of people in different situations. This course also focuses on developing skills for the role of the communicator for the nursing unit. Students will also be given the tools for developing and practicing assertive communication, interpersonal relationships, and confidentiality skills.

Prerequisite: Successful completion of HUG 106, HUG 108, HUC 114 and HUG 120. Enrollment in HUC 112, HUC 118, HUC 122, HUC 126, and HUC 132.

#### **HUC 114 - Unit Coordinator Tasks & Procedures I (7)**

Enables identification of the forms commonly used in the patient's chart. Students will learn to explain the purpose of a patient's chart and recognize the charting responsibilities for each health care team member. Presents instruction and procedures for scheduling appointments by telephone, computer, and writing. Also focuses on students' performance in the computer-skill laboratory, demonstrating their cognitive knowledge for maintaining medical records; ordering laboratory and diagnostic exams; accurately transcribing physicians' orders; recognizing treatment orders; ordering nursing supplies; identifying abbreviations, symbols, and terms used in a medication order; and charting information accurately to the appropriate forms and the Kardex for their pseudo patients.

Prerequisite: Enrollment in HUC 106, HUC 108, and HUC 120.

#### **HUC 118 - Advanced Communications in the Health Unit Coordinator Role (2)**

This 20 hour course will enable the student to describe and utilize good listening skills as a means of preventing and/ or solving conflicts with a variety of people in different situations. The focus also will be to advance the development skills for the role of the communicator for the nursing unit and introduce units of instruction for HIV/AIDS education. The student will also be given the tools for developing and practicing advance assertive communication, diversity, interpersonal relationships and confidentiality skills. Students will research topics at Clover Park Technical College Library.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Enrollment in HUC 112, HUC 113, HUC 122, HUC 126, and HUC 132.

#### **HUC 120 - Unit Management I (3)**

This 30 hour course gives the student instructions for management responsibilities for the nursing unit. This course will also focus on instruction of time management and identification of possible fire and safety hazards on the nursing unit.

Prerequisite: Enrollment in HUC 106, HUC 108, and HUC 114.

#### **HUC 122 - Unit Management II (3)**

Focuses on cognitive knowledge for managing the nursing unit and developing verbal and written communication skills. Students will develop leadership and performance skills by practicing classroom management.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Enrollment in HUC 112, HUC 113 ,HUC 118, HUC 126, and HUC 132.

#### **HUC 126 - Legal/Ethical Aspects of Unit Coordinating (2)**

Enables students to identify legal elements that are necessary in regard to preparing legal documents, discussing hospital and patient confidentiality, or witnessing signatures on consents for treatment. The ethics of this profession will be explored, and students will learn how to apply these ethics in professional behaviors. Covers AIDS education, blood- borne pathogens, HIPAA and hepatitis information.

Prerequisite: Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. Enrollment in HUC 112, HUC 113 ,HUC 118, HUC 122, and HUC 132.

**HUC 132 - Clinical Experience (7)**

Enables students to use the cognitive and performance objectives from courses HUC 106 through 126 in the clinical setting. The course focuses on resume preparation, employment application, and an employment interview. In order to participate in the clinical aspect of the program, students must receive a "No Record On File" report from the Washington State Patrol regarding crimes against persons. Clinical hours vary from six to eight hours per day four days per week. Students unable to complete course HUC 132 will have the option of completing a clinical rotation with the next available program on approval from the instructors within six months."

Prerequisite: 1st Quarter - Successful completion of HUC 106, HUC 108, HUC 114, and HUC 120. 2nd Quarter - Successful completion of HUC 112, HUC 113, HUC 118, HUC 122, HUC 126.

**HUC 204 - Electrocardiogram Monitor Technician (3)**

Examines basic cardiac function, normal and abnormal cardiac rhythms, etiology of arrhythmias, and interpretation of EKG tracing. Class time will consist of lectures, identifying rhythms, and group challenges. This course provides students with an excellent baseline understanding of both simple and more complex rhythms.

Prerequisite: Students enrolled in the second quarter of Health Unit Coordinator program.

**HUM - Humanities****HUM& 101 - Introduction to Humanities (5)**

An introduction to the humanities through investigation of current cultural events offered by local communities. Study of the arts - painting, sculpture, architecture, drama, film, music, and dance - will be enhanced by attending performances and on-location field trips to sites in the community. Students will become familiar with terminology of the arts and with community performance/demonstrations of these same arts (Multicultural content) (Writing intensive).

Prerequisite: Completion of ENG 094 with a minimum grade of "C" or equivalent.

**IAUT - Automotive Core****IAUT 104 - Introduction to Automotive Electrical (4)**

This course introduces students to automotive electrical theory, electrical components, basic electrical testing

equipment and procedures, and wire splicing techniques.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Corequisite: IAUT 105, IAUT 115, IAUT 130, and IAUT 140. Must be completed with a grade of 2.3 or better.

**IAUT 105 - Introduction to Automotive Trades (4)**

This course introduces students to the automotive careers and development of an employment plan, shop safety, automotive systems and components, basic hand tool identification and use, how to use a variety of measuring tools, basic shop tool identification and use, scientific theory applicable to automobiles, fastener identification and repair, and how to perform automotive preventive maintenance inspections. Students will also have the opportunity to earn professional certification in safety and pollution prevention, lift safety, and automotive information systems.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement. Corequisite: IAUT 104, IAUT 115, IAUT 130, and IAUT 140. MAT 092 or meet appropriate placement.

**IAUT 115 - Introduction to Automotive Steering, Suspension & Brakes (5)**

This course introduces students to automotive steering, suspension, and braking system theory, component identification, and inspections. Students learn how to read and interpret tire markings, alignment theory, restraint system operation and inspection, and introduces students to disc and drum brake systems.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Corequisite: IAUT 104, IAUT 105, IAUT 130, and IAUT 140. Must be completed with a grade of 2.3 or better.

**IAUT 130 - Automotive HVAC (2)**

This course introduces students to automotive HVAC system theory and component identification.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Corequisite: IAUT 104, IAUT 105, IAUT 115, and IAUT 140. Must be completed with a grade of 2.3 or better.

**IAUT 140 - Basic Automotive Welding (4)**

This course teaches students how to perform set-up, operation and maintenance of oxygen-acetylene welding, cutting and heating equipment and how to operate, maintain and utilize gas-metal arc welding (GMAW) to produce basic welds used in the automotive industry.

Prerequisite: Successful completion of ENG 094 or meet appropriate placement and be concurrently enrolled in MAT 092 or meet appropriate placement while enrolled in IAUT. Corequisite: IAUT 104, IAUT 105, IAUT 115, and IAUT 130. Must be completed with a grade of 2.3 or better.

**LEADR - Leadership****LEADR 100 - Leadership I (1-6)**

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

**LEADR 101 - Leadership II (1-6)**

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

**LEADR 102 - Leadership III (1-6)**

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study,

observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

**LEADR 103 - Leadership IV (1-6)**

Students taking this course will gain a basic understanding of the concept of leadership theory while developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and developing and improving their own leadership skills. This course integrates leadership studies through study, observation and application. This course will encourage a high level of class discussion and active participation. You will have a chance to work through case studies, participate in simulations, interact with experienced leaders, analyze popular films using leadership themes, and discuss the impact of current events and the realities of leadership.

**MAP - Medical Assistant****MAP 108 - Introduction to Medical Assisting (4)**

Learn and demonstrate asepsis and infection control. Perform anthropometric measurements, vital signs and physical examination. Instruction and discussion also includes the overall function of the medical assistant within the health care team, including legal responsibilities and limitations. College and program policies and procedures are extensively discussed. This course must be successfully completed in order to proceed in the program.

Prerequisite: Attend the highly recommended information session/advising meeting with an instructor before or once the student has registered for MAP 108. Corequisite: CAH 102, CAH 105, and COLL 102.

**MAP 121 - Body Systems Theory 101 (4)**

Caring for patients with disorders associated with hematology, endocrinology, obstetrics and gynecology, urology and male reproduction, and gastroenterology. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: Co-requisite: MAP 124.

**MAP 124 - Body Systems Applications 101 (3)**

Practice fundamental skills relating to Body Systems Theory 101. Skills include microhematocrit, blood glucose

monitoring, care and use of the microscope, pregnancy testing, physical and chemical urinalysis, and UA slide preparation.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: Co requisite: MAP 121.

#### **MAP 146 - Body Systems Applications 102 (4)**

Practice fundamental skills relating to Body Systems Theory 102. Skills include practicing care and usage of the otoscope, vision exams, audiometry testing, peak flow meters and small volume nebulizers, and performing ECGs, as well as phlebotomy skills.

Prerequisite: Completion of MAP 121 and MAP 124. Corequisite: MAP 147.

#### **MAP 147 - Body Systems Theory 102 (4)**

Caring for patients with disorders associated with ophthalmology and otolaryngology, pulmonary medicine, neurology and mental health, cardiology, phlebotomy, and microbiology. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.

Prerequisite: Completion of MAP 121 and MAP 124. Corequisite: MAP 146.

#### **MAP 164 - Body Systems Applications 103 (4)**

Practice fundamental skills relating to Body Systems Theory 103. Skills include wound and burn care; assisting with application and removal of sutures, surgical staples and casting; asepsis and infection control; identifying surgical instruments and proper care of instruments; assisting with minor office surgery; and operating the autoclave. Also includes activities related to safety and emergency practices and uploading immunizations into the college designated database.

Prerequisite: Completion of MAP 146 and MAP 147.

#### **MAP 166 - Body Systems Theory 103 (4)**

Caring for patients with disorders associated with dermatology, orthopedic medicine, and surgical asepsis, as well as learning procedures and safety and emergency practices. Instruction will include anatomy and physiology, pathophysiology, pharmacology, and terminology.

Prerequisite: Successful completion of MAP 146 and MAP 147.

#### **MAP 176 - Computers for the Healthcare Setting (5)**

Perform tasks within the electronic health record. Included tasks include: computerized patient appointment and procedure scheduling, accounts receivable & payable, and documentation of clinical interactions. Practice of knowledge and skill acquired from previous quarters

Prerequisite: Completion of MAP 178, MAP 181, and MAT 092 or higher.

#### **MAP 178 - Health Insurance & Coding (6)**

Acquire information regarding private and public insurance programs. Practice fundamental skills relating to ICD-10 and CPT. Coding utilizing the coding books, computer and/or specific software. Practice of knowledge and skill acquired from previous quarters.

Prerequisite: Completion of MAP 182 and MAP 184. Corequisite: MAP 181.

#### **MAP 181 - Financial Practices (4)**

Covers basics of manual and computerized accounts receivable. Emphasis on course outcomes from previous course related to healthcare, procedural and diagnostic coding.

Prerequisite: Completion of MAP 182 and MAP 184. Corequisite: MAP 178.

#### **MAP 182 - Patient Reception & Legal Components (4)**

Emphasis on customer service within the health care field, focusing on effective communication with the patient while projecting and promoting a positive image of the profession and the office. This course also includes telephone techniques, patient scheduling, introduction to chart management, and business correspondence for the medical office, including cover letter and resume preparation. Define law and ethics relating to the health care field focusing on components specific to medical assistants.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: MAP 184.

#### **MAP 184 - Medical Records Management (3)**

Instruct and apply knowledge relating to medical records, including the creation, management, and legality of both the paper and electronic record, as well as filing systems utilized within the health care office. Focus will also include assisting patients in obtaining health and community services, as well as supplies and inventory control.

Prerequisite: Successful completion of CAH 102, CAH 105CL, COLL 102, and MAP 108. Corequisite: MAP 182.

### **MAP 209 - Externship Preparation 1 (3)**

Introduction of pharmacology math (with estimation components), administering oral and parental (intramuscular, subcutaneous, and intradermal) medications, performance of phlebotomy and microbiology while adhering to medical/surgical asepsis and universal/ standard precautions. Also included are student demonstrations of patient flow.

Prerequisite: Successful completion of MAP 121, MAP 124, MAP 146, MAP 147, MAP 178, MAP 181, MAP 182, and MAP 184. This course must be taken the quarter immediately prior to Quarter 5 courses. If more than one quarter passes before beginning Quarter 5, students will have to repeat this course. Corequisite: MAP 164, MAP 166, and MAP 176.

### **MAP 212 - Externship Preparation 2 (3)**

Demonstrate competencies of skills acquired throughout the Medical Assistant Program. Each student will perform and must pass the following skills at a mastery level while adhering to standard precautions: medical/ surgical asepsis, blood pressures, patient workups, growth charting, phlebotomy skills, urinalysis, hematocrit, blood glucose check, audio and visual exam, electrocardiogram, telephone techniques and appointment scheduling used within the medical office, computerized accounts payable/receivable, the electronic record, and chart management. Instruction will include caring for pediatric patients and geriatric patients.

Prerequisite: Successful completion of MAP 164, MAP 166, MAP 176, and MAP 209. Successful completion of general education courses and compliance with the MAP immunization policy and personal health insurance policy. Corequisite: MAP 215 and MAP 222.

### **MAP 215 - Externship (8)**

Capstone course gives students practical experiences in physician offices and/or clinics. Student must successfully pass MAP 212 in order to be eligible for this course.

Corequisite: MAP 212 and MAP 222.

### **MAP 222 - Community Employment Opportunities & Locations (1)**

Locates the major medical employers (including hospitals) in the student's community, along with their human resources departments. This course also includes

interviewing techniques, updating your resume, and methods of applying for employment through a variety of sources.

Corequisite: MAP 212 and MAP 215.

## **MASST - Massage**

### **MASST 101 - Swedish Massage Theory (4)**

Explores the history, benefits, and fundamental strokes of Swedish Massage, examining their physiological and psychological effects. Students will develop therapist-client communication skills and understand proper body mechanics for ensuring a safe and effective massage therapy session.

Prerequisite: None. Corequisite: Swedish Massage Theory is taken concurrently with Swedish Massage Practice (MASST 103).

### **MASST 103 - Swedish Massage Practice (4)**

Covers Swedish Massage techniques including effleurage, petrissage, friction, and tapotement. Acquiring proficiency in delivering full-body relaxation massages, integrating correct body mechanics, effective client communication, and adjusting stroke techniques according to client preferences and therapeutic indications.

Prerequisite: None. Corequisite: Swedish Massage Practice is taken concurrently with Swedish Massage Theory (MASST 101).

### **MASST 105 - Anatomy, Physiology & Pathology I (3)**

Explores the integumentary, skeletal, fascial, muscular, and nervous systems. Gain knowledge of structures, functions, pathologies, and their essential connection to massage therapy.

Prerequisite: None.

### **MASST 107 - Kinesiology I (3)**

Covers the fundamental principles of Kinesiology. Students will develop skills in range of motion, anatomical terminology, and palpation, enabling them to precisely identify bony landmarks, muscle locations, and their attachments of the upper body.

Prerequisite: None.

### **MASST 108 - Business and Ethics I (3)**

Covers ethical principles and standards essential for

maintaining a professional and therapeutic environment, as well as the use of safe hygiene, sanitation, draping and the understanding of ethical terminology.

Prerequisite: None.

#### **MASST 138 - Deep Tissue Massage Theory (4)**

Explores deep tissue massage techniques integrating hydrotherapy to alleviate muscle tension, manage chronic pain, and enhance mobility. Students focus on proper body mechanics, client assessment, postural and gait analysis. With the study of indications, contraindications and conditions students develop skills to deliver a safe deep tissue massage.

Prerequisite: Successful completion of Swedish Massage Theory (MASST 101) and Swedish Massage Practice (MASST 103). Corequisite: Deep Tissue Massage Theory is taken concurrently with Deep Tissue Massage Practice (MASST 140).

#### **MASST 140 - Deep Tissue Massage Practice (4)**

Covers palpation and range of motion assessment. Clinical reasoning is applied during treatment planning for acute and chronic injuries, postural imbalances, and chronic pain, applying pressure principles to meet client goals. Extensive practice of hydrotherapies, myofascial release, trigger point, and proprioceptive techniques are given during the student-operated clinic.

Prerequisite: Successful completion of Swedish Massage Theory (MASST 101) and Swedish Massage Practice (MASST 103). Corequisite: Deep Tissue Massage Practice is taken concurrently with Deep Tissue Massage Theory (MASST 138).

#### **MASST 142 - Anatomy, Physiology & Pathology II (3)**

Covers human anatomy with a focus on the cardiovascular, digestive, lymphatic, and respiratory systems. Gain knowledge of structures, functions, pathologies, and their essential connection to massage therapy.

Prerequisite: None.

#### **MASST 154 - Kinesiology II (3)**

Covers locating bony landmarks and muscle attachments in the lower body as well as safely integrating range of motion techniques, identifying muscles involved in specific movements for advanced skill development.

Prerequisite: Successful completion of Kinesiology I (MASST 107).

#### **MASST 164 - Business and Ethics II (3)**

Practices students' skills for establishing a thriving and ethical massage business, with a focus on integrating therapeutic communication, and key business operations, while navigating the state laws and rules relevant to massage and massage businesses.

Prerequisite: Successful completion of Business Ethics I (MASST 108).

#### **MASST 168 - Student Clinic I (1)**

Covers the set-up and operation of a student massage clinic. Students will gain insight into the day-to-day activities involved in managing a clinic.

Prerequisite: Successful completion of Swedish Massage Theory (MASST 101), Swedish Massage Practice (MASST 103) and Business and Ethics I (MASST 108).

#### **MASST 205 - Clinical Massage Theory and Pathology (3)**

Covers diverse massage therapy techniques in various clinical settings. Students cultivate advanced assessment skills, formulation of treatment planning, and clinical reasoning to address specific musculoskeletal conditions. Areas of caution, pathologies, indications, and contraindications are focused considerations in providing therapeutic care.

Prerequisite: Successful completion of Deep Tissue Massage Theory (MASST 138) and Deep Tissue Massage Practice (MASST 140). Corequisite: Clinical Massage Theory and Pathology is taken concurrently with Clinical Massage Practice and Pathology (MASST 210).

#### **MASST 210 - Clinical Massage Practice and Pathology (3)**

Practices advanced techniques in clinical massage practice, focusing on patient assessment, treatment planning, and collaboration with healthcare professionals. Enhancing skills in addressing musculoskeletal conditions, injury rehabilitation, and chronic pain management. Focus is on evidence-based practice and ethical considerations for optimal patient care.

Prerequisite: Successful completion of Deep Tissue Massage Theory (MASST 138) and Deep Tissue Massage Practice (MASST 140). Corequisite: Clinical Massage Practice and Pathology is taken concurrently with Clinical Massage Theory and Pathology (MASST 205).



### **MASST 215 - Anatomy, Physiology & Pathology III (3)**

Examines the Urinary and Reproductive Systems, emphasizing their structure, function, and relevance in massage therapy. Explore inflammation, tissue repair, and integrate Sports Physiology, refining skills to address diverse client needs in the context of both sports and therapeutic massage practices.

Prerequisite: Successful completion of Anatomy, Physiology & Pathology I (MASST 105).

### **MASST 220 - Kinesiology III (2)**

Covers the identification of bony landmarks and muscle attachments in the Head and Neck. A comprehensive review of all muscle of the body will be conducted, preparing students for the Washington State approved Massage Licensure exam.

Prerequisite: Successful completion of Kinesiology I (MASST 107).

### **MASST 225 - Business and Ethics III (3)**

Covers concepts on structuring clinical businesses, including insurance billing and business management, equips students with essential skills for a successful massage therapy career in Washington State and prepares students for state licensure and enhance employability.

Prerequisite: Successful completion of Business and Ethics II (MASST 164) or Licensed Massage Therapist (LMT).

### **MASST 230 - Student Clinic II (2)**

Covers the topics on running a massage clinic. Beyond honing their skills in relaxation and deep-tissue massage, each student will actively engage in administrative roles by rotating through positions such as receptionist, cashier, and scheduling manager.

Prerequisite: Students must pass a Washington State Criminal Background check and possess a current Red Cross/First Aid and American Heart Association CPR card in order to participate in this course. Successful completion of Deep Tissue Massage Theory (MASST 138), Deep Tissue Massage Practice (MASST 140) and Student Clinic I (MASST 168).

### **MASST 235 - Assess and Treat the Upper Body (4)**

Covers the topics of assessment and treatment in the upper body by leveraging students' anatomical knowledge to assess and treat common issues in the neck, shoulders, arms, and upper back effectively.

Prerequisite: Successful completion of Clinical Massage Theory and Pathology (MASST 205), Clinical Massage Practice and Pathology (MASST), or a Licensed Massage Therapist (LMT).

### **MASST 240 - Assess and Treat the Lower Body (4)**

Covers the topics of assessment and treatment in the lower body by leveraging students' anatomical knowledge to assess and treat common issues in the hips, thighs, calves, and feet effectively.

Prerequisite: Successful completion of Clinical Massage Theory and Pathology (MASST 205), Clinical Massage Practice and Pathology (MASST 210), or a current Licensed Massage Therapist (LMT).

### **MASST 245 - Massage Business Start Up (3)**

Explores the topics of launching and growing a massage business, including crafting a professional massage website, developing effective social media planning, establishing marketing budgets and strategies, and creating essential business forms.

Prerequisite: Completion of Business and Ethics III (MASST 225) or Licensed Massage Therapist (LMT).

### **MASST 250 - Practicum (1)**

Practices students' massage skills in real-world client interactions under the guidance of experienced professionals, preparing you for a successful career in massage therapy.

Prerequisite: Successful completion of Student Clinic II or current Massage Therapist License.

### **MASST 255 - Self-Care for the Massage Therapist (1)**

Covers self-care strategies to tackle burnout, prioritize physical well-being, and boost overall health for peak performance in the massage therapy field.

Prerequisite: Currently enrolled in the Massage program or a Licensed Massage Therapist.

## **MATH - Mathematics**

### **MATH& 107 - Math in Society (5)**

Exploration of mathematical concepts, with emphasis on observing closely, developing critical thinking, analyzing and synthesizing techniques, improving problem-solving skills, and applying concepts to new situations. Core topics are probability and statistics. Additional topics may be chosen from a variety of math areas useful in our society.

Prerequisite: Appropriate placement or successful completion of MAT 099.

### **MATH& 141 - Precalculus I (5)**

Covers linear, quadratic, polynomial, rational, absolute value, exponential, logarithmic, and inverse functions and equations; composite functions, linear and quadratic inequalities, graphs of functions, relations, and inequalities; and graphic transformations. Introduces limits, linear and quadratic curve fitting, and mathematical modeling, including exponential growth and decay. Graphing calculator required.

Prerequisite: Appropriate placement or successful completion of MAT 099.

### **MATH& 142 - Precalculus II, Functional Trigonometry (5)**

Covers circular, trigonometric, and inverse trigonometric functions, and graphs; trigonometric and inverse trigonometric identities; trigonometric equations; vectors and elementary vector operations; and polar and parametric equations and their graphs. Graphing calculator required.

Prerequisite: Appropriate placement or successful completion of MATH& 141 or equivalent.

### **MATH& 146 - Introduction to Statistics (5)**

Descriptive and inferential statistics, including measures of central tendency, dispersion or variation, and skewness. Students are introduced to basic concepts in probability, as well as discrete and continuous probability distribution functions. Statistical inference includes sampling, elementary experimental design, and hypothesis testing using normal, student's T, and F-distributions; linear regression and correlation; and the chi-square distribution. Graphing calculator is required.

Prerequisite: Appropriate placement OR Successful completion of MAT 094 OR concurrent enrollment in MATSI 146.

### **MATH& 151 - Calculus I (5)**

Covers algebraic and transcendental functions, continuity, limits (including indeterminate forms), derivatives and differentials of algebraic and transcendental functions (e.g., exponential, logarithmic, and trigonometric forms), applications of differential calculus, and an introduction to antiderivatives or indefinite integrals. Graphing calculator is required.

Prerequisite: Successful completion of MATH& 142 or equivalent.

### **MATH& 152 - Calculus II (5)**

Topics of calculus are presented geometrically, numerically, and symbolically. MATH& 152 topics include applications of integration, differentiation, and methods of integration, including improper integrals. Graphing calculator required.

Prerequisite: Successful completion of MATH& 151 or equivalent.

## **MAT-Mathematics**

### **MAT 92 - Pre-Algebra (Formerly MAT 082) (5)**

Covers basic operations with whole numbers, fractions, decimals, percentages, ratios and proportions, signed numbers, algebraic expressions, linear equations, order of operations, basic geometry, units of measurement, and introduction to statistics.

Prerequisite: Appropriate placement.

### **MAT 94 - Introduction to Algebra (Formerly MAT 091) (5)**

Develops algebraic topics, including algebraic expressions, solving linear equations and inequalities, coordinate graphing, systems of equations, polynomials, factoring, and introduction to rational expressions.

Prerequisite: Appropriate placement or successful completion of MAT 092.

### **MAT 99 - Intermediate Algebra (5)**

Expands on algebraic topics, including solving equations and inequalities, graphing of linear and nonlinear equations, and rational expressions. Develops topics, including roots and radicals; solving absolute value equations and inequalities; solving quadratic, exponential and logarithmic equations; and introduction to functions.

Prerequisite: Appropriate placement OR successful completion of MAT 94 OR concurrent enrollment in MATSI 99.

### **MAT 103 - Business Mathematics (5)**

Covers discounts, markup and markdown, payroll, simple and compound interest, annuities, amortization payments, taxes, insurance, and business statistics in an algebra-based development. Scientific calculator required.

Prerequisite: Successful completion of MAT 092, or equivalent, or concurrent enrollment in MATSI 103.

### **MAT 105 - Mathematics for Industrial Professionals (5)**

Develops elements of algebra, geometry, metric measure, and trigonometry to calculate areas, volumes, and angles for polygonal objects, objects with smooth curves, and composite objects. Includes applications to material strength, tapers, pulleys, gears, screw threads, and elementary engines. Scientific calculator required.

Prerequisite: Successful completion of MAT 092, or equivalent, or concurrent enrollment in MATSI 105.

### **MAT 108 - Math for Health Occupations (5)**

Develops elements of algebra, including quadratic equations with real roots and unit conversion processes applied to U. S. and metric measure, calculation of dosages, and intravenous infusions. Covers solutions and dilutions, elementary chemical calculations, and elementary non-linear functions. Scientific calculator required.

Prerequisite: successful completion of MAT 094, or equivalent, or concurrent enrollment in MATSI 108.

### **MAT 111 - Math for Cosmetology/Esthetics Professionals (5)**

This course is designed to prepare students interested in the cosmetology or esthetics career to gain confidence in the mathematics and problem solving they may encounter. Topics covered include: methods of mathematical operations; order of operations; fractions; percentages; decimals; mathematical expressions and equation; solving variable equations and formulas; markdowns and markups; simple business math calculations; unit analysis, including US and metric measuring systems; time management.

Prerequisite: Successful completion of MAT 092, or equivalent, or concurrent enrollment in MATSI 111.

### **MAT 114 - Basic Mathematics, Basic Physics, Weight and Balance (5)**

**Perform all of the mathematical computations required in the Aviation Maintenance Technician curriculum. Covers the scientific principles that apply to the operation of aircraft, engines and the equipment that the aviation maintenance technician will be in daily contact with. Develop a comprehensive understanding of the importance of weight and balance to aircraft safety, and make all of the required calculations for weight and balance checks, equipment changes, extreme loading checks and the addition of ballast.**

Prerequisite: Successful completion of MAT 092, or

equivalent, or concurrent enrollment in MATSI 114.

### **MAT 311 - Mathematical Techniques for Operations Management (5)**

Provides students with the foundational mathematical tools required for operations management, including acceptance sampling, decision theory, probability theory, and linear programming.

Prerequisite: Successful completion of MATH& 146.

### **MAT 413 - Measurement and Statistical Process Control (5)**

Introduces key tools used in statistical process control, including control charts, continuous improvement, acceptance sampling, and the design of experiments. Also covers fundamental metrology principles, including error measurement and analysis, the impact of temperature and pressure on precision measurement, equipment calibration, and advanced test and measurement techniques.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

## **MATSI - Math Supplemental Instruction**

### **MATSI 99 - INTERMEDIATE ALGEBRA SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the Intermediate Algebra course. MATSI 99 requires concurrent enrollment in a linked section of MAT 99, and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MAT 99.

### **MATSI 103 - BUSINESS MATHEMATICS SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the college-level Business Mathematics course. MATSI 103 requires concurrent enrollment in a linked section of MAT 103 and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MAT 103.

### **MATSI 105 - INDUSTRIAL MATHEMATICS SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the college-level Mathematics for Industrial Professionals course. MATSI 105 requires concurrent enrollment in a linked section of MAT 105 and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MAT 105.

### **MATSI 108 - HEALTH MATHEMATICS SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the college-level Mathematics for Health Occupations course. MATSI 108 requires concurrent enrollment in a linked section of MAT 108 and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MAT 108.

### **MATSI 111 - COSMETOLOGY/ESTHETICS MATHEMATICS SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the college-level Mathematics for Cosmetology/Esthetics Professionals course. MATSI 111 requires concurrent enrollment in a linked section of MAT 111 and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MAT 111.

### **MATSI 114 - Basic Mathematics, Basic Physics, Weight and Balance SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the college-level Basic Mathematics, Basic Physics, Weight and Balance course. MATSI 114 requires concurrent enrollment in a linked section of MAT 114 and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MAT 114.

### **MATSI 141 - Precalculus I Supplemental Instruction (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the Precalculus I course. MATSI 141 requires concurrent enrollment in a linked section of MATH & 141, and provides intensive instruction, workshopping, and programming that supports students' development in mathematics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MATH& 141.

### **MATSI 146 - INTRODUCTION TO STATISTICS SUPPLEMENTAL INSTRUCTION (3)**

This course is intended for students whose placement indicates the need for additional instructional support to be successful in the college-level Introduction to Statistics course. MATSI 146 requires concurrent enrollment in a linked section of MATH& 146 and provides intensive instruction, workshopping, and programming that supports students' development in statistics.

Prerequisite: Appropriate placement. Corequisite: Designated, linked section of MATH& 146.

## **MEC - Mechatronics**

### **MEC 115 - DC Circuits (5)**

Covers DC electrical terms, equations and theory. Presents techniques used for solving problems involving resistance, voltage, and current in circuits. Presents fundamental laws and relationships applied to the analysis of circuits, including capacitors and/or inductors. Basic circuit fabrication techniques and standard instrumentation used in test and measurement of DC circuits will also be covered.

Prerequisite: Successful Completion of MEC 201 or MET 111 Successful completion of MEC 120 or MET 112 Successful completion of MEC 201 or MET 113.  
Corequisite: MEC 140.

### **MEC 116 - AC Circuits (5)**

Covers AC circuit analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Introduces standard instrumentation used in testing AC circuits and measurement of AC circuits and systems.

Discusses wiring techniques for AC power systems.

Prerequisite: Successful completion of MEC 115.

### **MEC 120 - Computer Aided Design I (5)**

Introduces the use of parametric Computer-Aided Design (CAD) software to design parts working from engineering sketches and/or prototypes.

### **MEC 128 - Applied Statics and Strengths of Materials (5)**

Study of forces acting on structures at rest: free-body diagrams, trusses, friction and related material, which may include hydrostatic pressures and loads, cables, and arches. Includes analysis of tension, compression, shear, deformation, and stress acting on members. Also includes analysis of material properties and their classification and characterization.

Prerequisite: Successful completion of MATH& 141.

### **MEC 132 - Lean Manufacturing (5)**

This course offers students opportunities to deploy and apply lean principles, concepts, and methods locally - within a work cell, work, group or value stream. The course focuses on workshop and project implementation of specific lean concepts and techniques and the qualities and habits that characterize a culture of continuous quality improvement.

### **MEC 140CL - Computer Programming and Logic (5)**

Introduces computer programming and problem solving. Topics include language syntax, data types, program organization, algorithm design, and logic control structures. Also covers program design techniques, such as flowcharts and the use of pseudocode.

### **MEC 163 - Industrial Survey (5)**

This course is an exploration of current mechatronics applications in regional industry. Students will examine and analyze the implementation of various mechatronics improvements and process solutions through field tours, interviews with experts, and presentations by local industry professionals.

Prerequisite: Successful completion of MEC 115 and MEC 116.

### **MEC 165 - Robotics (5)**

Covers basic robot terminology and operational skills, including safety, moving a robot in joint and world modes, and creating Teach Pendant programs. Students will also

learn about preventative maintenance and program a robot to carry out simple tasks representative of industrial practice.

Prerequisite: Successful completion of MEC 140.

### **MEC 173 - Applied Mechatronics (5)**

In this course, students develop applied systems by integrating elements of the constituent fields of mechatronics: electrical, mechanical, communication, control, and computing processes and devices. Students revisit fundamental skills and apply them to multidisciplinary challenges in the lab. Projects may include construction and modification of equipment to increase the capacity of the mechatronics lab.

Prerequisite: Successful Completion of MEC 115, 230, 235, and 240.

### **MEC 201 - Systems Approach (5)**

The analysis and manipulation of complex systems from a top-down modular approach. Students learn how to divide a complex system into smaller modules and mapping them down to their single components, identifying sources of power, control signals, and conversions of energy along the way.

### **MEC 202 - Total Mechatronics (5)**

A course that provides an expedited analysis of the core disciplines utilized in mechatronics. The course serves as a refresher or introduction to the most important principles utilized within the realm of mechatronics including AC/DC circuits, motors and drives, PLC programming, digital electronics and networks, hydraulics and pneumatics, and mechanical systems.

### **MEC 230 - Programmable Control of Fluid Power (5)**

Building upon fundamental knowledge of fluid power and systems thinking, this course provides experience in controlling pneumatic and hydraulic machinery with industrial programming. The course covers the application of fluid power and digitalization of control with programmable Logic Controllers (PLCs) within a mechatronic system. Students learn how to safely program and document fluid power systems with advanced industrial control software.

Prerequisite: Successful completion of MEC 115 and MEC 140. Corequisite: None.

### **MEC 235 - Programmable Controls in Industrial Networks (5)**

Building upon fundamental knowledge of programmable controls and digital and analog signals, this course provides experience in connecting and controlling industrial machinery. The course covers the physical to application layer of networked machine control and data, providing the connectivity of industrial cyber-physical systems. Students learn how to construct industrial networks and user interfaces from a PLC integration environment, while employing proper risk management principles.

Prerequisite: Successful completion of MEC 115 and MEC 140. Corequisite: None.

### **MEC 240 - Motors, Drives, & Mechanical Transfer Systems (5)**

Building upon fundamental knowledge of mechanical, electrical and control systems, this course provides experience with the transfer of power through drives, motors, and mechanical elements. The course covers the application of VFDs and stepper/servo controllers and drives within a mechatronic system including all its mechanical components. Students learn how to safely construct, optimize and repair electro-mechanical components of mechatronic systems associated with power transfers.

Prerequisite: successful completion of MEC 115 and MEC 140. Corequisite: None.

### **MEC 273 - Applied Mechatronics Cap. (5)**

In this course students develop applied systems by integrating elements of the constituent fields of mechatronics: electrical, mechanical, communication, control, and computing processes and devices. Students revisit fundamental skills and apply them to multidisciplinary challenges in the lab. Projects may include construction and modification of equipment to increase the capacity of the mechatronics lab.

Prerequisite: Successful Completion of MEC 115, 230, 235, and 240. Corequisite: None.

### **MEC 289 - Internship/Work Experience (5)**

Provides students with practical on-the-job experience and offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to the student's educational and career objectives in the field of mechatronics. Includes a weekly seminar component.

Students must submit, at or before registration, a description of the proposed internship, signed by the employer, the instructor, and the student.

Prerequisite: Instructor's permission.

## **MEC - Bachelor of Applied Science in Mechatronics Engineering Technology and Automation**

### **MEC 301 - Introduction to Industry 4.0 - Knowledge (1-24)**

This introductory course offers participants a comprehensive overview of Industry 4.0, exploring its foundational principles, key technologies, and real-world applications. Participants will gain an understanding of the Industry 4.0 paradigm shift and its transformative impact on manufacturing, supply chains, and business operations. Participants will learn how Industry 4.0 technologies such as IoT, AI, big data analytics, cloud computing, and cyber-physical systems are revolutionizing industrial processes and driving digital transformation across various sectors.

### **MEC 304 - Fixtures and Workflow - Knowledge (1-24)**

The course takes a product focus approach to manufacturing, by examining the organization structures and Lean principles applied to the design and construction of complex manufacturing production systems. Participants will learn how to analyze a product for its manufacturability. The course includes professional communication between designers and customers to bridge DFM and DFA inconsistencies, how to select manufacturing methods and create flow, how to develop metrics and determine economic and sustainable production.

### **MEC 307 - Industrial Internet of Things - Knowledge (1-24)**

Participants will gain a broad perspective on IIoT technologies and industry 4.0 applications. An in-depth exploration will be made of the theory and application of large-scale networking of sensors in industry and the data collection and analysis work that results. Topics include remote field devices, smart sensors, RFID tracking, edge devices and cloud computing platforms. Focus will be spent on how to identify suitable applications, how to merge OT with IT, how to capture the data generated, and exploring a lean approach to data management.

**MEC 314 - Environmentally Sustainable Manufacturing - Knowledge (1-24)**

An examination of frameworks and methods including lean management practices that lead to the reduction of waste, and the economic benefits of sustainable management perspectives focusing on the supply chain. Participants will learn how to quantify the environmental impacts from raw material to product end of life, learn how to develop and implement responsible strategies and tools to achieve sustainable and efficient manufacturing processes. Includes examination of Life Cycle Assessment of products, manufacturing, and supply chains.

**MEC 317 - Programming for Industry 4.0 - Knowledge (1-24)**

The course emphasizes the application of programming languages for IT/OT (Information Technologies/Operational Technologies) synthesis. Participants will work on seamless information and instruction flows between various industrial devices from the perspective of programming. Experience will be gained in programming in the most up-to-date environments used in Industry. Students will program in C++, C#, Python, and other languages in the application of a complex industrial system. The class will analyze the current state of the ever-changing ecosystem of programming environments and relate them to practical applications.

**MEC 324 - Advanced Embedded Systems - Knowledge (1-24)**

This course is designed to provide engineers with a robust theoretical foundation and hands-on design experience, positioning them as adept architects of embedded systems in the transformative landscape of Industry 4.0 and cyber-physical systems.

Participants will explore advanced topics in the design, development, and optimization of embedded systems, with a focus on real-world applications and industry best practices.

**MEC 327 - Advanced Sensors and Actuators - Knowledge (1-24)**

Sensors and actuators are the foundational elements that enable systems and machines to communicate, self-diagnose, and adapt in real-time, driving efficiency, flexibility, and productivity. The knowledge course establishes the methods and concepts around complex sensing and actuation devices, including communications, smart-sensors and actuators, signal conditioning, and programming. Participants will explore the nervous system

of modern society through complex industrial sensors and actuators strategies.

**MEC 334 - AI and Data Analytics - Knowledge (1-24)**

The course covers the theory and structures of algorithms for machine learning and inference, from an AI perspective. Python and C based languages will be employed to process large data sets through both conventional and AI based systems. Participants will practice drawing conclusions from given data and setup models for capturing data. This covers data collection, data cleaning, and data mining, where algorithms are used to automatically connect data points into a higher resolution patterns and structures.

**MEC 340 - Control Systems - Knowledge (1-24)**

The course is designed for industry professionals working in manufacturing, process industries, and automation who seek to enhance their knowledge and skills in control systems programming, implementation, and optimization.

The course will cover advanced topics in control theory, industrial control systems, and practical applications, with a focus on real-world challenges and best practices.

**MEC 342 - Programmable Automation Controllers - Knowledge (1-24)**

The course provides an in-depth exploration of Programmable Automation Controllers (PACs) and their applications in the field of industrial automation. Participants will gain a comprehensive understanding of the theoretical principles, programming languages, and practical implementations of PACs in diverse industrial settings. Emphasis will be placed on the strategic insights needed to proficiently apply and integrate Programmable Automation Controllers (PACs) in the context of Industry 4.0 and digital transformation.

**MEC 344 - Machine Vision - Knowledge (1-24)**

The course gives a general overview of machine vision and introduces the student to machine vision software and hardware. The course covers common topics like finding known models in images, depth perception, camera calibration and alignment, image stabilization, tracking of objects, photometry, boundary detections, environmental factors and point clouds, along with various sensing technologies.

**MEC 347 - Interconnectivity in Cyber-Physical Systems - Knowledge (1-24)**

The course delves into the intricacies of interoperability and information exchange within the landscape of Industry

4.0, where seamless data flow between people, computer systems, physical machines, and services is paramount. Participants will gain a thorough understanding of how interoperability enables efficient data exchange and sharing of information between system components and processes, essential for modern life, society, and the technical landscape of Industry 4.0.

#### **MEC 352 - Contract Manufacturing in Industry 4.0 - Knowledge (1-24)**

Leveraging the accessibility to manufacturing equipment and cyber-physical systems allow “lot size one” manufacturing. The course establishes how Industry 4.0 concepts can provide sustainable business opportunities for small to medium manufacturers (SME) in the contract manufacturing (CM) industry sector.

Participants will explore the CM paradigm through cyber-physical machine and business integration in an Industry 4.0 framework.

#### **MEC 354 - Machine Creation - Knowledge (1-24)**

The course provides perspectives on the field of Original Equipment Manufacturer (OEM) machine design and manufacturing. Participants will gain knowledge on engineering principles, machine design concepts, manufacturing processes, and business considerations essential for machine design and OEM business models.

Prerequisite: CAD software proficiency, for example MEC 120 OR MET 112 Basic Mechatronics fundamentals, for example MEC 202 OR MET 113.

#### **MEC 357 - Dynamics of Machinery and Kinematics - Knowledge (1-24)**

A mathematical and visual exploration of the functions used to describe the motions and momentums of machine elements with an emphasis on the application of motion control. This course introduces students to the application of the principles of dynamics to mechanisms and machine elements. Students learn how to visualize and analyze motions in machines, how to create new machines based upon desired kinematics.

#### **MEC 364 - Computerized Maintenance Management Systems - Knowledge (1-24)**

The course establishes how leveraging CMMS within the framework of Industry 4.0 and smart manufacturing enables organizations to proactively manage maintenance operations, optimize asset performance, and drive operational efficiency across the manufacturing ecosystem.

Participants will explore how centralized asset management through CMMS facilitates informed decisions on maintenance scheduling and lifecycle management, bolstered by seamless integration with Enterprise Resource Planning (ERP) and Manufacturing Execution Systems (MES) for streamlined workflows.

#### **MEC 367 - Automation Evaluation and Implementation - Knowledge (1-24)**

Examination of the business, safety, and social considerations involved in the decision to automate and the effective implementation thereof. Participants will examine the choices involved from a managerial perspective.

#### **MEC 370 - Simulation, Emulation, and Digital Twins - Knowledge (1-24)**

Adapt digital tools like simulations, emulators, and Digital Twins of industry instances for virtual commissioning, predictive maintenance and process optimization. How modeling, testing, and optimizing systems with digitalization enables engineers and operators to improve efficiency, reliability, and safety in industrial operations. The course introduces the participants to the areas of virtual process planning and execution.

#### **MEC 372 - Production Process Development in Industry 4.0 - Knowledge (1-24)**

This advanced course builds upon fundamental principles of production engineering to explore cutting-edge topics at the intersection of process innovation, sustainability, and digital transformation.

Participants will gain a deep understanding of how industry 4.0 technologies can leverage new production processes, process redesign, and process optimization to enhance productivity, reduce costs, and ensure sustainable production practices. Content on digitalization strategies for manufacturing, industrial innovation and “continuous improvement” culture will also be covered.

#### **MEC 374 - Process Control - Knowledge (1-24)**

Process Control studies the transformation of raw materials or substances into finished products through continuous or batch processing. The course establishes the fundamentals of Process Industry automation and the handling of analog signals, PID controls, and multiple process variables typically found in process control. Emphasis will be placed upon methods and workflows for keeping various industrial processes under statistical control towards a desired outcome.



**MEC 377 - Cyber-Physical Product Systems - Knowledge (1-24)**

This advanced course delves into the intricacies of managing product systems within the context of innovation, sustainability, and digital transformation. Participants will explore how product system management strategies can leverage new technologies, redesign products, and optimize processes to enhance product performance, reduce environmental impact, and ensure sustainable product lifecycle practices. By integrating these concepts into the enterprise's digitalization strategy, participants will learn how to drive innovation and foster a culture of continuous improvement within their organizations.

**MEC 380 - Human-Centric Digitalization - Knowledge (1-24)**

Human-centric digitalization aims to empower individuals, enhance productivity, and improve quality of life by leveraging digital technologies in ways that are inclusive, empathetic, and aligned with human values and aspirations. The course argues the perspective that technology should serve as a tool to augment human capabilities, foster creativity, and enable meaningful connections and experiences.

Course participants will examine the intersection of technology, human behavior, and organizational culture to drive successful digital transformation initiatives in society.

**MEC 384 - Cyber-Physical Security - Knowledge (1-24)**

Cyber-physical security extends the scope of cybersecurity to encompass the protection of physical assets and systems that are interconnected and controlled by computers or digital technologies.

The course focuses on securing cyber-physical systems (CPS), which integrate physical processes with computing and communication technologies to monitor, control, and automate various industrial, critical infrastructure, and IoT applications.

Cyber-physical security aims to safeguard digital assets and physical assets, such as industrial equipment, machinery, sensors, actuators, and control systems, from threats that can impact their operation, safety, and reliability.

**MEC 385 - Management in Industry 4.0 - Knowledge (1-24)**

In the context of Industry 4.0, characterized by the

transformative impact of cyber-physical technologies across industries, effective management necessitates a blend of technical proficiency, adaptive leadership capabilities, and nonlinear problem-solving skills. This course explores the critical competencies essential for navigating the intricacies of digital transformations.

**MEC 387 - Robotic Integration - Knowledge (1-24)**

Robotic integration in industrial processes is complex and requires careful planning, coordination, and expertise across multiple disciplines. The course identifies the significant factors for consideration like diversity in equipment and systems, safety and regulatory standards, workforce training, and acceptance. Participants will elaborate on methods and workflow for successful integration and deployments.

**MEC 404 - Fixtures and Workflow - Skill (1-24)**

The course focuses on fundamental skills development within the context of manual, semi-automatic, and automatic product flows. Participants will delve into the intersection of work-cell and production-flow influence on total system output. The course provides practice on the applications of fixture design and workflow optimization for advanced manufacturing.

**MEC 407 - Industrial Internet of Things - Skill (1-24)**

Participants will practice broad perspective IIoT technologies and industry 4.0 applications. Focus will be spent on industry 4.0 fundamentals like specifying and communicating suitable IIoT applications, how to merge OT with IT, how to capture the data generated, and practice appropriate industrial data management.

**MEC 414 - Environmentally Sustainable Manufacturing - Skill (1-24)**

The course builds applications of the three-pillar and lean theoretical concepts covered in the knowledge course. Participants will identify and collect data to build “triple bottom line currencies” for enhancing product/process sustainability, reducing ecological footprint, streamline process chains, community integration, eliminate waste, and drive continuous improvement.

**MEC 417 - Programming for Industry 4.0 - Skill (1-24)**

The course focuses on programming for industrial hardware control. Participants will utilize languages like C++, Python, and Java to control systems, analyze sensor data, develop simulation models, enable human-machine interfaces, establish interconnectivity, and transportability. Practice practical applications of programming languages

in Industry 4.0 systems.

Prerequisite: Successful completion of MEC 317.

**MEC 424 - Advanced Embedded Systems - Skill (1-24)**

The course focuses on providing engineers the ability to practice integrating intelligent and interconnected industrial metaverse solutions to real-world challenges faced in industry where connected systems, smart technologies, and data-driven decision-making are transforming every-day life.

Participants will pursue the practical application and seamless integration of embedded systems within the context of the fourth industrial revolution and the digital transformation of people, enterprise, and community.

**MEC 427 - Advanced Sensors and Actuators - Skill (1-24)**

Building upon the methods and knowledge essential for applying sensor and actuator systems in industrial settings, the course is tailored for engineers seeking to enhance their expertise in the practical implementation of advanced sensors and actuators within cyber-physical systems.

**MEC 434 - AI and Data Analytics - Skill (1-24)**

This course covers the application of algorithms for machine learning and inference, from an AI perspective. Participants will develop AI and data analytics solutions including collecting and modifying datasets, use large data sets, modifying algorithms, to deploy AI models for control of process variables, predictive maintenance, production flows, and organizational support functions.

**MEC 442 - Programmable Automation Controllers - Skill (1-24)**

The course is tailored to industry professionals seeking expertise in the practical application and seamless integration of Programmable Automation Controllers (PACs) within industrial settings.

Participants will develop skills to design, implement, and optimize PAC-based systems, positioning them as key contributors to the evolving landscape of smart and connected industries. The course provides a hands-on approach to facilitating digital transformations across diverse industrial domains.

**MEC 444 - Machine Vision - Skill (1-24)**

The course provides practice in the application of computer vision and machine vision fundamentals and principles. Participants will solve typical machine vision challenges

present in industry and gain practical experience on implementing vision systems in industry processes.

**MEC 447 - Interconnectivity in Cyber-Physical Systems - Skill (1-24)**

The course explores the realization of interconnectivity and interoperability. Participants will establish data streams through the various layers of enterprise and society.

Content will be centered on application of principles, standards, technologies, and best practices driving interconnectivity and interoperability in complex environments, providing skills development in navigating the challenges and opportunities presented by the rapidly evolving landscape of smart technologies.

**MEC 450 - Mechatronics Project Management Preparation and Planning (2)**

Precursor to the Mechatronics Project Management course. Students will begin the planning and preparation for the management of a complex mechatronics project.

Prerequisite: Successful completion of 25 credits of upper division MEC courses.

**MEC 452 - Contract Manufacturing in Industry 4.0 - Skill (1-24)**

The course focuses on developing a Contract Manufacturing (CM) business model and validating its three-pillar sustainability. Participants will use Industry 4.0 reinforced CM frameworks and methods to design manufacturing processes with integrated digital tools and cyber-physical assets. Emphasis will be placed upon the synthesis of business management and technology within a CM business model.

**MEC 454 - Machine Creation - Skill (1-24)**

The course is designed to provide participants with practical skills and experience in OEM machine design and manufacturing. Participants will apply the fundamentals of machine design, manufacturing processes, and project management techniques essential for success in the OEM industry.

**MEC 457 - Dynamics of Machinery and Kinematics - Skill (1-24)**

The course covers the applications of kinematics and inverse kinematics for machine construction and automation. Participants will practice designing cyber-physical tools for motion profiles, machine elements, and determining the joint configurations necessary to achieve specific end-effector positions or trajectories.

### **MEC 464 - Computerized Maintenance Management Systems - Skill (1-24)**

The course is a practice in the deployment of CMMS and the use of CMMS for enterprise operation through modalities like mobile-accessible platforms where engineers and technicians can receive real-time alerts, access equipment manuals, and execute remote maintenance tasks from anywhere.

Participants will explore how the integration of real-time sensor data into CMMS enables predictive maintenance, preempting equipment failures and minimizing downtime while maximizing operational efficiency while ensuring compliance with industry regulations by documenting maintenance activities and generating audit trails.

### **MEC 467 - Automation Evaluation and Implementation - Skill (1-24)**

The application of created frameworks, methods, and models for automation implementations. The course also covers the evaluation and continuous improvement of those systems from a three-pillar sustainability and PLM (Product Lifecycle Management) perspective. Participants will practice managerial application matrices on industry 4.0 systems.

### **MEC 470 - Simulation, Emulation, and Digital Twins - Skill (1-24)**

Get hands on experience in some of the most relevant and needed areas of industry utilizing virtual process planning while preparing upcoming production. Participants will practice preparing products for production with virtual tools and how to conduct virtual process planning of a production cell consisting of various components such as machines, fixtures, robots, and products.

### **MEC 472 - Production Process Development in Industry 4.0 - Skill (1-24)**

The course covers the realization and application of industry 4.0 technologies according to production engineering principles with the goal of process innovation, sustainability, and digital transformation.

Participants will establish industry 4.0 production flows using industry 4.0 technologies, process redesign, and process optimization to enhance productivity, reduce costs, and ensure sustainable production practices. By integrating these concepts into the enterprise digitalization strategy, participants will learn how to drive innovation and foster a culture of continuous improvement within their organizations.

### **MEC 474 - Process Control - Skill (1-24)**

The course emphasizes the executed application derived from process industry documentation, control strategies, and loop designs, with a focus on controlling temperature, pressure, mixing and other common process variables through PLC's/PAC's and SCADA. Participants practice keeping a process steady, do alterations to the process with predictable outcomes, and how to bring the process back under control if destabilized.

### **MEC 477 - Cyber-Physical Product Systems - Skill (1-24)**

The course covers the realization and application of product systems within the context of innovation, sustainability, and digital transformation.

Participants will leverage new technologies, redesign products, and optimize processes to enhance product performance, reduce environmental impact, and ensure sustainable product lifecycle practices. By following enterprise digitalization strategies, participants will drive innovation and continuous improvement efforts within an organizational framework.

### **MEC 480 - Human-Centric Digitalization - Skill (1-24)**

Practicing human-centric digitalization involves integrating principles of user-centered design, empathy, and collaboration into every stage of the digital transformation process.

The course provides practice in the skills needed to design user-centered solutions that meet the needs and preferences of diverse stakeholders. Participants will apply the principles, methodologies, and best practices of human-centric design and digital transformation. Participants will gain practical experience in conducting user research, prototyping, usability testing, and iterative design to create impactful digital solutions that enhance user experiences and drive business and organizational outcomes.

### **MEC 484 - Cyber-Physical Security - Skill (1-24)**

The course is designed to equip industry professionals with practical skills in safeguarding critical systems against emerging threats and vulnerabilities.

Participants will practice keeping processes and systems operational by leveraging cyber-physical security principles and methods.

### **MEC 485 - Management in Industry 4.0 - Skill (1-24)**

Participants will learn how to leverage digital technologies and apply principles of change management to effectively

lead and facilitate the deployment of multidisciplinary teams. Emphasis will be placed on cultivating the skills required to assemble and lead dynamic human-machine augmented cross-functional teams capable of delivering innovative solutions to adaptive challenges in today's rapidly evolving society.

#### **MEC 487 - Robotic Integration - Skill (1-24)**

The course provides real-world projects aimed at developing the skills needed to effectively integrate robots into industrial processes. Using methods and workflows, participants will practice integrating robots with other industrial equipment while generating documentation covering areas like system requirements, design specifications, programming code, simulation results, and testing procedures. Participants will develop teamwork and communication skills required for interdisciplinary teams comprising engineers, technicians, operators, and other stakeholders involved in robotic integration projects.

#### **MEC 490CAP - Mechatronics Project Management (5)**

Project Management of a team of Mechatronics students in the design and build of a complex mechatronics project.

Prerequisite: Successful completion of MEC 450.

## **MET - Manufacturing Engineering Technologies**

#### **MET 111 - Systems Approach (5)**

The analysis and manipulation of complex systems from a top-down modular approach. Students learn how to divide a complex system into smaller modules and mapping them down to their single components, identifying sources of power, control signals, and conversions of energy along the way.

Prerequisite: MEC or MET Instructor Permission.

Corequisite: MET 112 & MET 113 OR MEC 120 & MEC 202.

#### **MET 112 - Computer-Aided Design for Manufacturing (5)**

Introduces the use of parametric Computer-Aided Design (CAD) software to design parts working from engineering sketches and/or prototypes.

Prerequisite: MEC or MET Instructor Permission.

Corequisite: MET 111 & MET 113 OR MEC 201 & MEC 202.

#### **MET 113 - Total Mechatronics (5)**

This course provides an expedited analysis of the core disciplines utilized in mechatronics. The course serves as a refresher or introduction to the most important principles utilized within the realm of mechatronics including AC/DC circuits, motors and drives, PLC programming, digital electronics and networks, hydraulics and pneumatics, and mechanical systems.

Prerequisite: MEC or MET Instructor Permission.

Corequisite: MET 111 & MET 112 OR MEC 201 & MEC 120.

#### **MET 121 - Manual Machining (5)**

This course familiarizes students with the safe operation of manual machining equipment, from lathes and mills to surface grinders, bench grinders, vertical and horizontal bandsaws, and tool grinders. Students will efficiently manufacture components utilizing a variety of manual machines and processes. Students will use precision hand tools and measuring instruments to process and inspect manufactured components according to blueprints and geometric dimensioning & tolerancing (GD&T) requirements. Students will learn to plan efficient order of operations within a manual machine cell, including selection of appropriate tooling to perform various cutting operations.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 120, MEC 201, & MEC 202 OR MET Program Instructor Permission.

#### **MET 122 - Applied Statics & Strengths of Materials (5)**

Study of forces acting on structures at rest: free-body diagrams, trusses, friction and related material, which may include hydrostatic pressures and loads, cables and arches. Includes analysis of tension, compression, shear, deformation, and stress acting on members. Also includes analysis of material properties and their classification and characterization.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

#### **MET 123 - 2D Cutting CAD/CAM/CNC (3)**

This course introduces the CAD-CAM-CNC workflow of 2-Dimensional Cutting operations, to include: Waterjet, Plasma, & Laser CNC Machines. Students will utilize digital work environments to design and manufacture complex 2-D shapes to be cut with 2- and 2.5-axis cutting machines. Students will

understand the design for manufacturing constraints of the various 2-D Cutting processes, particularly as they relate to material selection & properties.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 131 - CAD/CAM/CNC Mills (5)**

This course covers the design-prototype-manufacture workflow of 3-axis machining centers. Students will safely operate, maintain, setup, program, run, & troubleshoot 3-axis machining centers. Students will design, program, & manufacture components using 3-axis machining centers in multiple ways: manually writing G-Code, conversational programming, & with CAM software. Students will measure parts with precision measurement instruments and inspect the physical part to a blueprint of their own design, to include geometric dimensioning & tolerancing (GD&T).

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 132 - Lean Manufacturing (5)**

This course offers students opportunities to deploy and apply lean principles, concepts and methods locally—within a work cell, work group or value stream. The course focuses on workshop and project implementation of specific lean concepts and techniques, and the qualities and habits that characterize a culture of continuous quality improvement.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 133 - Fixturing & Workflows (3)**

This course covers practical applications of Design for Manufacturing (DFM) & Design for Automated Assembly (DFAA) principles in relation to fixturing & work holding for products being manufactured. Students will analyze the differences between traditional manufacturing workflows such as job shop & batch production to modern, Lean Just-In-Time (JIT) workflows, and determine the pros and cons associated with each. Students will design & manufacture modular, flexible fixturing to hold components to be manufactured with a variety of different manufacturing processes (milling, turning, etc.).

Prerequisite: MET 111, MET 112, & MET 113 OR MEC

201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 141 - CAD/CAM/CNC Lathes (5)**

This course covers the design-prototype-manufacture workflow of 2- & 3-axis live-tooling turning centers. Students will safely operate, maintain, setup, program, run, & troubleshoot 2- & 3-axis live-tooling turning centers. Students will design, program, & manufacture components using 2- & 3-axis live-tooling turning centers in multiple ways: manually writing G-Code, conversational programming, & with CAM software. Students will measure parts with precision measurement instruments and inspect the physical part to a blueprint of their own design, to include geometric dimensioning & tolerancing (GD&T).

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 142 - Robotics (5)**

Covers basic robot terminology and operational skills including safety; moving a robot in joint and world modes; and creating Teach Pendant Programs. Students will also learn about preventative maintenance, and will program a robot to carry out simple tasks representative of industrial practice.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 143 - Programming & Macros (3)**

This course covers the use of custom programming for CNC machining and turning centers, as well as industrial and collaborative robots. Students will write custom programs, subprograms, & macros involving logic, control structure, functions, and variables. Students will demonstrate the value of custom programming in multiple manufacturing methods, particularly as they pertain to automation of these processes.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 211 - Multi-Axis CAD/CAM/CNC (5.0)**

This course covers the workflow and operation of 4- & 5-axis CNC machining centers. Students will safely operate, maintain, setup, program, run, & troubleshoot 4- & 5-axis machining centers. Students will design & manufacture components utilizing the benefits and design for

manufacturing constraints of setup reduction & complex part geometry capable with 4- & 5-axis machining centers. Students will inspect parts with complex geometry by comparing the physical part to a CAD model using a Coordinate Measuring Machine (CMM).

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 212 - Additive Manufacturing (5.0)**

This course covers additive manufacturing – AKA 3D Printing – and how it is both innovating and disrupting modern manufacturing and design methods. Students will understand the operating principles of each mainstream AM process and how these principles govern its performance and limitations. Students will learn to identify how, when, and where additive manufacturing can improve manufacturing processes and products across the entire product lifecycle, from design concepts to end-of-life. Students will apply design for manufacturing constraints to components they design and additively manufacture.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 213 - Generative Design (3.0)**

This course covers the merits and use of generative design as an alternative design process. Students will input design goals into the generative design software, along with parameters such as performance or spatial requirements, materials, manufacturing methods, and cost constraints. The software explores all the possible permutations of a solution, quickly generating design alternatives. Students will define, run, and post process generative design studies for various manufacturing applications. Students will target the key outcomes of generative design: part performance, weight & material cost reduction, & part consolidation. Students will then select & manufacture generatively-designed components using a variety of manufacturing methods.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 221 - Industrial Survey (5.0)**

This course provides opportunities to research and prepare for employment in advanced manufacturing industries. Students will survey companies to assess their current levels of implementation,

particularly as they relate to Industry 4.0 technologies. Students will utilize modern networking techniques to build a professional online presence.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 222 - Internship (5.0)**

This course provides an opportunity to prepare for a career in an advanced manufacturing industry. Students will apply their technical skills & knowledge in an advanced manufacturing environment. Students will compare academic theory to observed practices in industry.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 223 - Production Supervisor (3.0)**

This course develops the leadership potential of students. Students will apply communication, organization, and technical skills to supervise, assist, & mentor fellow students operating in a simulated production cell environment. Students will ensure the smooth & efficient operation of the production cell through total preventative maintenance techniques, as well as maintaining a clean, safe, and orderly work environment.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 298 - Creative Engineering Lab (5)**

This course utilizes the engineering design process to engineer useful, original, & innovative solutions to problems. Students will - in a collaborative environment – practically learn & apply mechanical, electrical, & computer engineering design concepts towards the inspiration, design, prototyping, & creation of their original products. Students will utilize a wide variety of manufacturing methods, processes, & machines towards the realization of their designs.

Prerequisite: MET 111, MET 112, & MET 113 OR MEC 201, MEC 120, & MEC 202 OR MET Program Instructor Permission.

### **MET 299 - Training & Practice (1 - 5)**

This course provides an opportunity to practice skills related to job entry in the field of advanced manufacturing. Students will identify

areas of personal, professional development to pursue and work with instructors to accomplish competency-based tasks aligned with their professional development. Students will use problem solving, time management, & professionalism to the completion projects and tasks related to development goals.

Prerequisite: MET Program Instructor Permission.

## MLT - Medical Laboratory Technician

### MLT 206 - Immunology (6)

An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of various serological procedures used to diagnose and monitor diseases states. Includes quality control, quality assurance, and safety procedures.

Prerequisite: Successful completion of CAH 110, COLL 102, BIOL& 160, college level math (MATH& 146 or statistics recommended), college level Psychology or Sociology, computer literacy, CHEM& 110 or higher, and ENGL& 101. Corequisite: None.

### MLT 209 - Phlebotomy/Processing (4)

Skill development in the performance of blood collection using a variety of methods, equipment, proper techniques and following standard precautions. Emphasis on blood collection methods, infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology.

Prerequisite: Successful completion of CAH 110, COLL 102, BIOL& 160, college level math (MATH& 146 or statistics recommended), college level Psychology or Sociology, computer literacy, CHEM& 110 or higher, and ENGL& 101. Corequisite: None.

### MLT 219 - Immunohematology (8)

The course emphasizes the study and laboratory detection of blood group antigens and antibodies of the ABO, Rh, and other blood group systems. Topics include donor screening, processing and storing of the various blood components for transfusion, pre-transfusion testing procedures, detection of antigen/antibody reactions, which may affect transfusion, hemolytic disease of the fetus and newborn, neonatal and obstetrical transfusion practice and adverse effects of transfusion.

Prerequisite: Successful completion of CAH110, MLT 209, MLT 230, and MLT 211. Corequisite: None.

### MLT 223 - Clinical Chemistry (6)

Students will study the relationship between blood levels of many substances and normal-versus-abnormal physiology and disease. Students will perform manual and semi-automated procedures for the assay of commonly measured blood components. Preventative maintenance of instruments, troubleshooting, and quality assurance are stressed throughout the course.

Prerequisite: MLT 225 Hematology & Coagulation and MLT 219 Immunohematology. Corequisite: None.

### MLT 225 - Hematology & Coagulation (8)

A thorough study of the development, identification and abnormalities associated with blood cells and hemostasis. Hematologic principles include the formation of blood cells, identification of normal and abnormal blood cells as they correlate to disease. Hemostasis is the study of the clotting and fibrinolytic mechanisms of the blood. The principles and performance of routine laboratory procedures and basic instrumentation to diagnose and monitor diseases are included.

Prerequisite: Successful completion of CAH 110. Corequisite: None.

### MLT 226 - Clinical Microbiology (6)

Principles and methods used in clinical microbiology including isolation, identification, and antibiotic susceptibility testing of pathogenic bacteria. Introduction to medical parasitology, mycology and virology. Laboratory component develops the technical and critical thinking skills used to evaluate clinical microbiology specimens.

Prerequisite: Successful completion of MLT 225 Hematology & Coagulation and MLT 219 Immunohematology. Corequisite: None.

### MLT 230 - Urinalysis & Body Fluids (6)

An overview of the anatomy and physiology of the urinary system and the normal and abnormal constituents of urine. Performance of routine urine analysis, both macroscopic and microscopic, with attention to abnormal results and the possible cause. The body fluids portion of the course introduces the production, collection, and analysis of various body fluids including the anatomy and physiology and routine laboratory testing. Correlate laboratory results to disease and abnormal states.

Prerequisite: Successful completion of CAH 110, COLL 102, BIOL& 160, college level math (MATH& 146 or statistics recommended), college level Psychology or Sociology, computer literacy, CHEM& 110 or higher, and ENGL& 101. Corequisite: None.

### **MLT 231 - Clinical Immunohematology (5)**

A clinical training rotation on campus. Students will develop entry-level competency skills in routine immunohematology procedures and solve real-world problems through review, case studies and performance of testing. Students will document daily supply inventory and temperature record-keeping, perform quality assurance procedures, and receive and complete testing orders.

Prerequisite: MLT 223 Clinical Chemistry and MLT 226 Clinical Microbiology. Corequisite: None.

### **MLT 238 - Clinical Experience I (11)**

The clinical phase of training is performed at an affiliated clinical laboratory full time, five days a week. Students will rotate through all laboratory departments and perform routine procedures using state-of-the-art methodologies with the goal being to demonstrate entry-level competency in all routine laboratory procedures. Students may be required to rotate at multiple facilities. Evening shifts may be required.

Prerequisite: Successful completion of MLT 223 Clinical Chemistry and MLT 226 Clinical Microbiology. Corequisite: None.

### **MLT 242 - Clinical Experience II (6)**

Continuation of the clinical phase of training is performed in an affiliated clinical laboratory full time, five days a week. Students will rotate through all laboratory departments and perform routine procedures using state-of-the-art methodologies with the goal being to demonstrate entry-level competency in all routine laboratory procedures. Students may be required to rotate at multiple facilities. Evening shifts may be required.

Prerequisite: Successful completion of MLT 231 Clinical Immunohematology and MLT 238 Clinical Experience I. Corequisite: None.

### **MLT 246 - Clinical Experience III (6)**

Final clinical phase of training is performed in an affiliated clinical laboratory full time, five days a week. Students will rotate through all laboratory departments and perform routine procedures using state-of-the-art methodologies with the goal being to demonstrate entry-level competency

in all routine laboratory procedures. Students may be required to rotate at multiple facilities. Evening shifts may be required.

Prerequisite: Successful completion of MLT 231 Clinical Immunohematology and MLT 238 Clinical Experience I. Corequisite: None.

## **MS - Material Science**

### **MS 123 - Fundamentals of Welding for the Non-Welding Major (5)**

Students will identify, perform, or witness various basic welding processes for prospective visual and non-destructive inspectors.

### **MS 126 - Fundamentals of Composites for the Non-Composites Technician (4)**

Introduces the various kinds of composite parts. This course explores the different types of resin, matrices, fibers, cores, and laminates. Students will explore their mechanical properties and the advantages of each type of composite structure. Covers the layup, winding, molding, curing, and repair of composite parts. Explores the role of NDT in testing composite parts after fabrication and after repair and the kinds of defects found.

### **MS 128 - OSHA, Occupational, Health And Safety (3)**

Introduces OSHA policies, procedures, and standards, as well as construction safety and health principles. Topics include scope and application of the OSHA construction standards. Special emphasis is placed on those areas that are the most hazardous, and includes hazard identification, avoidance, control, and prevention, using OSHA standards as a guide.

### **MS 131 - Blueprint Reading Fundamentals (3)**

Covers basic lines and views of drawings, identifying and interpreting weld and fabrication symbols, and locating NDT requirements.

## **MUSC - Music**

### **MUSC& 105 - Music Appreciation (5)**

Learn about elements of music, that is, the building blocks: pitch, melody, harmony, rhythm, texture, timbre, and dynamics. Study the evolution of music through the ages. This will not be a music history class, but rather an investigation of how music changed through time.

Prerequisite: Successful completion of ENG 094 or



equivalent.

## NAC - Nursing

### NAC 108 - Nursing Assistant Theory (5)

The Nursing Assistant Certified program prepares students to take the state examination for nursing assistant certification licensure. All three courses in the program must be successfully completed for students to be eligible to take the state examination. This course provides an introduction to the role and responsibilities of being a nursing assistant and meets the theory requirements for Washington State Nursing Assistant training.

Prerequisite: Current immunization and "no record of file" for crimes against children or vulnerable adults from the Washington State Patrol.

### NAC 111 - Nursing Skills Fundamentals (2)

This course covers instruction and practice of nursing assistant skills. Students will not be allowed to participate in the final skills exam unless attendance for all clinical hours has been fulfilled.

Prerequisite: Documentation of required immunizations and "No Record On File" from the Washington State Patrol and DSHS. Successful completion of NAC 108.

### NAC 114 - Unit Based Clinical Experience (2)

This course includes clinical experience in a long-term facility under the supervision of an instructor.

Prerequisite: Documentations of required immunizations. Students must have "No Record On File" related to crimes against children or vulnerable adults from the Washington State Patrol and DSHS. Successful completion of NAC 111.

## NDT - Nondestructive Testing

### NDT 108 - Introduction to NDT (5)

This course is an introduction to terms and definitions and a method overview of nondestructive testing. Methods include eddy current, visual liquid penetrant, magnetic particle, radiography, and ultrasonic testing.

### NDT 113 - Material and Processes for NDT I (5)

Explores the properties of materials, both metals and non-metals, and their applications in design and manufacturing. Introduction to Lean Concepts and applications.

### NDT 120 - Visual and Optical Testing (5)

Visual inspection is the most widely used method of nondestructive testing. Learn to detect various discontinuances related to the powerplant industry, structural steel fabrication and construction industries, aerospace industry, petrochemical industry, and manufacturing processes. Exercises are performed using many visual inspection tools.

Prerequisite: Successful completion of NDT 185.

### NDT 121 - Materials and Processes for NDT II (5)

Learn the major manufacturing processes used to fabricate parts, their possible discontinuities, and how to choose the appropriate NDT methods to inspect them.

### NDT 125 - Magnetic Particle Testing (5)

Covers the principles of magnetization, the selection of equipment, and the type of indications found. Students will operate, test, and maintain quality control of the equipment and report results.

### NDT 130 - Liquid Penetrant Testing (5)

Covers principles and practices of liquid penetrant inspection. Students will learn why and when to use various types of penetrant materials and the proper techniques necessary for reliable inspection. Addresses the evaluation of liquid penetrant indications, interpreting standards and specifications, and checking penetrant system quality. Students will review fundamental liquid penetrant principles and techniques; develop and write procedures; and inspect welds, castings, forgings, and machined components. Parts are evaluated according to relevant codes and/or standards.

### NDT 140 - Eddy Current Testing I (5)

Covers electromagnetic theory, types of Eddy Current sensing elements, selection of inspection parameters, readout mechanism and applications. Successful students will pass a simulated Level 1 general exam.

Prerequisite: Successful completion of NDT 125, NDT 185, and CAS 121.

### NDT 150 - Ultrasonic Testing I (5)

Covers the principles of acoustics. Introduces the basic pulse echo instruments, transducers and couplants. Covers the basic testing methods, calibration, and examinations to specific procedures. Successful students will pass a simulated Level 1 general examination.

Prerequisite: Successful completion of MS 123, MS 126 and NDT 185.

### **NDT 160 - Radiographic Testing I (5)**

Introduces students to basic principles and theory of radiography, methods and applications, safety, image quality and formation, exposure parameters and techniques, dark room and film processing techniques, and film characteristics.

Prerequisite: Successful completion of MS 123, MS 126, and NDT 185. Corequisite: Corequisite classes: NDT 190 and NDT230.

### **NDT 170 - Eddy Current Testing II (5)**

Covers a continuation of Eddy Current theory: factors that affect coil impedance, signal-to- noise ratio, selection test frequency, coupling and field strength. Includes an explanation of standards and specifications used in eddy current testing. Students will learn about the selection of the appropriate instruments, probes and standards necessary to perform the required tests. Successful students will pass a simulated Level II general and specific exam.

Prerequisite: None. Corequisite: Corequisite class NDT1210.

### **NDT 180 - Ultrasonic Testing II (5)**

Introduces the operation of various ultrasonic equipment and transducers in a variety of testing methods. Students will calibrate, test, and evaluate various product forms per procedures, standards, and codes. Successful students will pass a simulated Level II general and specific exam.

Prerequisite: Successful completion of NDT 185.  
Corequisite: Corequisite class: NDT 220.

### **NDT 185 - Physics for NDT Professionals (5)**

Covers physics concepts used in nondestructive testing, including right- triangle trigonometry, waves, sound, electric fields, electric current, resistance, circuits, magnetism, and the electromagnetic spectrum.

Prerequisite: Successful completion of MAT 099.

### **NDT 190 - Radiographic Testing II (5)**

Students will explore more advanced radiographic theory. Students will develop radiographic techniques commonly used in industrial testing. Includes a review of types and characteristics of defects and manufacturing processes. Students will explore safety principles and practices in working with radiographic equipment and isotopes. Covers

the practical applications of radiographic evaluation and interpretation per applicable standards, codes, and procedures. Successful students will pass a simulated Level II general and specific exam.

Prerequisite: None. Corequisite: Corequisite classes: NDT 160 & NDT 230.

### **NDT 210 - Eddy Current Testing III (5)**

Covers an extension of advanced Eddy Current theory. Students will simulate a Level II practice exam through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite: None. Corequisite: Corequisite class NDT170.

### **NDT 220 - Ultrasonic Testing III (5)**

Covers an overview of the basic principles and theories of Phased Array. Students will simulate a Level II practical exam through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite: Successful completion of MAT 099.  
Corequisite: Corequisite class NDT 180.

### **NDT 230 - Radiographic Testing III (5)**

Covers an overview of non-film radiography: computed radiography (CR), digital detector arrays (DDA), and computed tomography (CT), with emphasis on CR. Students will perform practical exercises to reinforce their understanding of the principles of CR. Students will take a simulated Level II practical exam with film radiography through development of a technique and evaluation per applicable standards, codes, and procedures.

Prerequisite: None. Corequisite: Corequisite classes: NDT 190 & NDT 160.

### **NDT 240CAP - Capstone Project (3)**

Designed to synthesize and integrate the knowledge gained in all previous courses and demonstrate the application of theory and practice through a project.

### **NDT 250 - NDT Internship (1-11)**

Provides on-the-job practical experience under the supervision of an employer. Instructor's permission is required for site choice.

Prerequisite: Advanced standing and instructor's permission.

## NOS - Network Operations and Systems Security

### **NOS 106CL - IT Fundamentals (8)**

This course covers aspects of troubleshooting preventative maintenance, hardware installation, configuration, diagnostics, and repair. Introduces students to the knowledge and skills necessary to competently use, install, configure, upgrade and troubleshoot current operating system technologies. Operating system topics include common components and features, installing, configuring, upgrading troubleshooting and basic networking. Includes hands-on training in a realistic lab environment which will help prepare students for the CompTIA IT Fundamentals and CompTIA A+ Certification Test.

### **NOS 110 - Cyber Security Fundamentals (4)**

Cyber Security Fundamentals is an introduction to the world of information security as it relates to technology. This course provides an overview of security challenges, defense strategies, and countermeasures in the information systems environment. Information on relevant topics, real-life user experiences, and hands-on projects will be used to explore foundational cybersecurity principals and to build a comprehensive security strategy.

### **NOS 115 - Introduction to Networking (4)**

Introduces fundamental networking concepts and technologies. This course should assist you in developing the skills necessary to plan and implement small networks across a range of applications. The focus of the course is to understand and apply the basic protocols used in computer networking. The student will apply basic troubleshooting to simple networks within the context of the ISO and TC/IP models. The course materials are online and reinforced with in-class lectures, labs, and exams.

### **NOS 126 - Desktop Support (8)**

Introduces knowledge, skills and tasks necessary to support, and secure windows client and server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for Information Systems Security professionals responsible for managing accounts and resources, maintaining client resources, monitoring client performance, safeguarding data, and securing client network operating systems.

### **NOS 130 - Server OS Installation and Configuration (4)**

Introduces knowledge, skills, and tasks necessary to

deploy, support, and secure windows server network operating systems in a variety of stand-alone and enterprise network environments. Provides extensive hands-on training for Information Systems Security professionals responsible for managing accounts and resources, maintaining server resources, monitoring server performance, safeguarding data, and securing server network operating systems.

### **NOS 135 - Scripting for Network Admins (4)**

This introductory scripting course is designed to provide students with the fundamental knowledge and skills to use scripting to automate administrative tasks commonly used by system administrators.

### **NOS 140 - Linux I (4)**

This course introduces students to the Linux Operating system with particular emphasis on command-line tools, utilities, and the BASH shell. The course will cover the various commands and utilities related to file system management, user and group creation, and text editing. Students will also be introduced to different Linux distributions and graphical user interfaces.

### **NOS 145 - Administering Windows Server OS (4)**

Introduces knowledge, skills, and tasks necessary for systems administrators to successfully implement core services in windows server operating systems. Provides extensive hands-on training for Information Systems Security professionals responsible for installing and maintaining a variety of network services. Including DHCP, DNS, IP addressing, and Virtual Private Network.

Prerequisite: Successful completion of NOS 130 or equivalent experience.

### **NOS 150 - Virtualization and Cloud Technologies (4)**

This course provides an overview of virtualization and cloud technologies focusing on using virtualization software in networked environments while building virtual networks, implementing clusters, enhancing performance and security, and using virtualization and cloud management tools to centralize management of multiple virtual servers. This class includes opportunities for hands-on learning experiences.

Prerequisite: Successful completion of NOS 106CL, or

equivalent experience.

#### **NOS 155 - Linux II (4)**

By using a hands-on team approach this course explores the various tools and techniques commonly used by Linux system administrators and end-users to achieve their day-to-day work in a Linux environment. Students will install various enterprise services and features used in the industry today.

Prerequisite: Successful completion of NOS 140 or a basic understanding of the Linux Operating System.

#### **NOS 161 - Offensive Server Security (4)**

Introduces the use of security best practices to analyze and interpret data server operating systems using threat monitoring software and offensive security tools. Successful students will effectively respond by providing counter-measures and preventive maintenance to and recover from incidents with server operating systems.

Prerequisite: Enrolled in or the successful completion of NOS140 Linux I.

#### **NOS 201 - Windows Hybrid Server (4)**

Introduces knowledge, skills, and tasks necessary to configure advanced Windows Server services using on-premises, hybrid and cloud technologies. This course also includes how to perform tasks related to high availability, troubleshooting, and disaster recovery. Provides hands-on training for Information Systems Security professionals responsible for installing and maintaining Windows Server operating systems.

#### **NOS 205 - Implementing Systems Security (4)**

A fundamental course of information technology security, infrastructure security, cryptography, and organizational security concepts. This includes access, attacks, audits, vulnerabilities, devices, physical security, algorithms, protocols, digital forensics, disaster recovery, penetration testing, social engineering, Reconnaissance, scanning, enumeration, vulnerability analysis, system hacking, malware, sniffers, session hijacking, denial of service, IDS, firewalls, honeypots, web servers, web applications, and SQL Injections, Wi-Fi, Bluetooth, and mobile devices, cloud computing and internet of things, and documentation.

Prerequisite: Successful completion of NOS 106CL or equivalent experience.

#### **NOS 210 - Digital Forensics and Investigations (4)**

Introduces the use of software to acquire and analyze digital data. Techniques will be used to demonstrate the use of statistical analysis practices to predict or show trends involving security issues crime and loss prevention

Prerequisite: Basic knowledge of operating systems.

#### **NOS 221 - Advanced Networking (9)**

Students will develop a comprehensive foundation for designing, securing, operating, and troubleshooting modern networks on the scale from small business networks to enterprise networks, with the emphasis on hands-on learning and essential career skills like problem solving and collaboration.

They will learn the basics of routing, switching, and wireless networking for local area networks and incorporate configuring and troubleshooting enterprise networks. In a physical lab or virtual lab simulator, we will configure and troubleshoot devices typical of a small to medium business. Students will also be introduced to network virtualization, automation, and Quality of Service (QoS) with Network security always being emphasized.

Prerequisite: Successful completion of NOS115.

#### **NOS 241 - Internship (6)**

Internships are intended to allow the student to utilize the skills and knowledge they possess or have obtained throughout their education process. During this course the students will participate in an onsite internship with intern partners or find an internship that meets NOSS program qualifications. Each student should complete at least 120 hours of internship. Internships will be verified by the internship coordinator. At course completion, the student and his / her on-site supervisor must complete a final survey/evaluation.

Prerequisite: Successful completion of NOS 145.

## **NOS - Bachelor of Applied Science in Cybersecurity**

#### **NOS 310 - Cyber Threat and Research (5)**

We will examine the common types of cyber-crimes and their motivation. We will survey laws, treaties, regulations, and frameworks designed to fight cybercrime and protect privacy as well as the security policy implications of each. We will assume the role of a local business and research the most important cyber threats to

our business.

### **NOS 315 - Risk Assessment and Vulnerability Management (5)**

We will examine risk assessment models, methodologies and processes. We will complete risk assessments and formulate mitigation recommendations to protect the confidentiality, integrity, and availability of critical data. We will examine methods used to prioritize and manage vulnerabilities.

### **NOS 320 - Securing Database Management Systems (5)**

We will explore current database management systems used in medium and large businesses. We will identify common security vulnerabilities in protocols as well as mitigation strategies for those vulnerabilities. This course includes an introduction to Structured Query Language (SQL) and relational database systems.

### **NOS 325 - Cloud Security (5)**

We will explore the technologies and services that enable cloud computing, different types of cloud computing models and the security and legal issues associated with cloud computing.

### **NOS 330 - Vulnerability Assessment (5)**

We will apply standard techniques to find possible cybersecurity vulnerabilities in systems, document them, determine their root cause, and propose possible mitigations. Students need an understanding of Linux at the command line and basic networking to be successful.

### **NOS 335 - Network Intrusion Detection (5)**

We will gain experience configuring, tuning, and administering the core components of modern IPS/IDS systems. We will also analyze results in the form of alarms, packet captures, and log files. We will conduct attacks and analyze the resulting artifacts.

### **NOS 340 - Penetration Testing (5)**

We will plan, organize and perform authorized penetration testing on a simple network. We will develop skills in interpreting responses as well as researching vulnerabilities and exploits. Improvisation, keeping detailed notes, and clear report writing will become fine arts.

### **NOS 345 - Incident Response (5)**

We will practice procedures used to determine if a system is compromised, mitigate the threat, and determine the root cause. We will use common digital forensic tools.

### **NOS 350 - Cybersecurity Professional Portfolio (2)**

Students will complete preparation for needed professional certifications, resume, and public profile items. This may include certification credentials like Security+ and a robust LinkedIn profile.

Prerequisite: Acceptance to the BAS-C program.

Corequisite: none. Crosslisted as: none.

### **NOS 355 - Cybersecurity Architecture (3)**

Cybersecurity architecture examines the application of cybersecurity principles in an enterprise setting. It is a wholistic examination of the relationship between business requirements, threats, infrastructure, and security controls through the lens of principles.

Prerequisite: Admission to the BAS-C Program and NOS 325 Cloud Security. Corequisite: None. Crosslisted as: None.

### **NOS 411 - Incident Response Project (5)**

Working in teams we will complete a series of increasingly complex incident scenarios. We will use common digital forensic tools. This course emphasizes speed, accuracy, and clear report writing.

### **NOS 412 - Penetration Testing Project (5)**

Working in teams, we will plan and conduct a series of cybersecurity audits of a simulated medium-sized business. The audits will use both technical and non-technical means. The team will prepare clear reports from both the internal customer and external customer perspectives.

### **NOS 413 - Network Intrusion Analysis Project (5)**

Working in teams, we will implement intrusion detection systems (IDS) on a testbed network, tune the systems to ignore normal traffic, analyze alerts, and write new rules to detect new threats. Over the course of the project, the testbed will change requiring us to re-assess our approach.

### **NOS 414 - Cloud Security Project (5)**

Working as a team, we will design and implement cloud security architectures for small and medium business using best practices.

Prerequisite: Completion of NOS 325 Cloud Security.

Corequisite: None.

### **NOS 415 - Industrial Control System Security Directed Project (5)**

Industrial Control System Security builds on an understanding of cybersecurity in an enterprise setting. We will discover what makes industrial control systems different from conventional informational technology systems. We will evaluate security design and operation. We will use common tools to complete network discovery and attack objectives.

Prerequisite: A firm understanding of network operation and incident response. Corequisite: none. Crosslisted as: none.

### **NOS 420 - Capstone Project (5)**

We will propose and complete an individual project to clearly demonstrate mastery of at least two of the program outcomes. The project proposal will include a timeline and concrete deliverables. The proposal must demonstrate new work and not rely mostly on previously completed work.

## **NURS - Nursing**

### **NURS 117 - Fundamentals of Nursing (4)**

Explores the health care system and the profession of nursing, with emphasis on care with a diverse population of clients and the basics of multicultural health. Introduces the beginning practical nurse student to essential nursing concepts, such as therapeutic communication, infection control, promotion of comfort, patient safety, patient education, evidence-based practice, Washington State Scope of Practice Decision Tree, coordination of care legal and ethical issues, standards of practice, and the nursing process.

Prerequisite: Admission to Practical Nursing program.

### **NURS 120 - Medical/Surgical Nursing I (3)**

Utilizing a physiological systems approach focus is on implementation of the nursing process in the care of a diverse population of clients, throughout the life span, with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations.

Topics will include

- musculoskeletal system

- gastrointestinal, hepatic and pancreatic systems
- cardiovascular systems
- respiratory systems
- immune system and infections, fluids
- electrolyte and acid base imbalances
- pain
- older adult care

Prerequisite: Admission to Practical Nursing program.

### **NURS 121 - Nursing Clinical Skills & Data Collection I (6)**

Students will learn, practice and demonstrate competence in collecting patient assessment data and utilizing the Washington State Scope of Practice Decision Tree. Safe medication administration will also be introduced in this course. A clinical experience will be included to allow for practice of basic daily patient care in a long term care setting.

Prerequisite: Admission to Practical Nursing program.

### **NURS 124 - Mental Health Nursing (3)**

Focuses of this course is on the continuum of mental health and illness and the therapeutic communication and the professional nurse-client relationship. Selected psychosocial disorders, including substance abuse, will be addressed, with emphasis on nursing interventions that promote well being of clients experiencing stressful events. Common interdisciplinary treatments, and services available for clients in inpatient and outpatient settings will be discussed. Suicide assessment and interventions will be a primary topic of this course.

Prerequisite: Admission to Practical Nursing program.

### **NURS 131 - Medical/Surgical Nursing II (3)**

Utilizing a physiological systems approach focus is on implementation of the nursing process in the care of a diverse population of clients with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations.

Topics will include

- patients having surgery
- hypertension

- heart failure
- respiratory system disorders
- hepatic, pancreatic and gallbladder disorders
- upper gastrointestinal disorders
- lower gastrointestinal disorders
- urinary system disorders

Prerequisite: Successful completion of NURS 117, NURS 120, NURS 121, and NURS 124.

### **NURS 133 - Medical/Surgical Nursing III (4)**

Utilizing a physiological system approach focus is on implementation of the nursing process in the care of a diverse population of clients with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations.

- Topics will include
- patients in shock
- integumentary system and disorders
- cardiovascular disorders
- respiratory system disorders
- hematologic and lymphatic system and disorders

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

### **NURS 134 - Pharmacology in Nursing (5)**

Prepares the student for calculation of drug dosages in order to accurately prepare and administer medication to a diverse client population. Presents pharmacological concepts and principles for preparation and administration of medications along with related client assessment and teaching. The role and responsibility of the practical nurse in drug therapy is emphasized. The course prepares the student to safely and effectively participate in medication therapy.

Prerequisite: Successful completion of NURS 117, NURS 120, NURS 121, and NURS 124.

### **NURS 137 - Nursing Clinical Skills & Data Collection II (5)**

Students will learn, practice, and demonstrate competence

in selected practical nurse skills using simulation and classmates as clients. Focus will be on safe nursing practice, utilization of the nursing process, therapeutic communication, documentation, and client teaching and utilizing the Washington State Scope of Practice Decision Tree. A clinical experience will be included to allow for practice of nursing skills and data collection in a safe, effective care environment.

Prerequisite: Successful completion of NURS 117, NURS 120, and NURS 121, NURS 124. .

### **NURS 140 - Maternity and Pediatric Nursing (3)**

This course will cover concepts of antepartum, intrapartum, postpartum, and newborn nursing with only an assisting role in the care of clients during labor and delivery and those with complications. It will also address the principles necessary for the student to care for clients throughout the age continuum. Special emphasis will be on the developmental stages of the pediatric client and how this impacts care. Common diseases and disorders related to each developmental stage are explored.

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

### **NURS 145 - Medical Surgical Nursing IV (4)**

Utilizing a physiological systems approach, focus is on implementation of the nursing process in care of a diverse population of clients with health disturbances. Emphasis will include promotion of physiological integrity through providing care and comfort, reducing client risk potential and managing health alterations.

Topics will include

- immune system and disorders
- cancers
- cardiovascular disorders
- genitourinary and reproductive system and disorders
- endocrine system and disorders

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

### **NURS 149 - Clinical Practicum I (5)**

Provides opportunity for the students to provide care for clients, with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medications to

diverse population of clients. Focus is on safe nursing practice, standards and scope of practice, therapeutic communication, documentation, and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to the final clinical week of quarter 4 (NURS 161/163).

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

#### **NURS 151 - Clinical Practicum II (4)**

Provides opportunity for the students to provide care for clients with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medications to diverse population of clients. Focus is on safe nursing practice, standards and scope of practice, therapeutic communication, documentation, and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to final clinical week of quarter 4 (NURS 161/163). Course Learning Outcomes NURS 149/151 quarter 3

Prerequisite: Successful completion of NURS 131, NURS 134, and NURS 137.

#### **NURS 154 - Issues & Trends in Nursing (2)**

Prepares the students for entry into nursing practice. Topics will include nursing leadership role of the practical nurse, nursing ethics the Washington State Scope of Practice Decision Tree, nursing history and trends, nursing licensure and legal aspects of nursing including the disciplinary probes substance abuse and professional values. Career opportunities, and opportunities for further education in nursing are explored.

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

#### **NURS 161 - Clinical Practicum III (4)**

Provides opportunity for the students to provide care for clients with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medication to diverse populations of clients. Focus is on safe nursing practices, standards and scope of practice, therapeutic communication, documentation and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent

practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to the final clinical week of quarter 4 (NURS 161/163). Course Learning Outcomes NURS 149/151 quarter 3

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

#### **NURS 163 - Clinical Practicum IV (5)**

Provides opportunity for the students to provide care to clients with physiological and psychosocial integrity in a variety of settings. Experience involves direct client care, nursing procedures, and administration of medication to diverse population of clients. Focus is on safe nursing practices, standards and scope of practice. therapeutic communication, documentation and patient education. Students are expected to demonstrate progressively increasing competence, confidence and independent practice in meeting the course objectives from week one of quarter 3 clinical practicum (NURS 149/151) to final clinical week of quarter 4 (NURS 161/163) Course Learning Outcomes NURS 149/151 quarter 3

Prerequisite: Successful completion of NURS 133, NURS 140, NURS 149, and NURS 151.

#### **NURS 170 - Introduction to Health and Wellness (5)**

Explores the beginning practical nurse role in the maintenance of health and wellness with an emphasis on the care of diverse, multi-cultural populations; including pediatric and reproductive individuals. This course will cover essential nursing concepts such as safe individual care, cultural consciousness, evidence-based practices, and scope of practice.

Prerequisite: Entrance into the Practical Nursing Program. Corequisite: None. Crosslisted as: None.

#### **NURS 171 - Introduction to Health and Wellness Lab (1)**

Students will learn, practice and demonstrate foundational nursing skills such as safe individual care, cultural consciousness, evidence-based practices and scope of practice in the care of individuals across the lifespan. Includes head-to-toe assessment, topical, oral, vaginal and rectal medication administration, activities of daily living, blood glucose, vital signs and PPE.

Prerequisite: Entrance into the Practical Nursing Program. Corequisite: NONE. Crosslisted as: NONE.



**NURS 172 - Introduction to Health and Wellness  
Clinical/SIM (5)**

Students will observe and demonstrate foundational nursing skill such as safe individual care, cultural consciousness, evidence-based practices, practical nursing scope of practice and clinical judgement in the simulation and healthcare settings.

Prerequisite: Entrance into the Practical Nursing Program.  
Corequisite: NONE. Crosslisted as: NONE.

**NURS 173 - Communication in Healthcare I (2)**

Students will learn communication strategies to promote the health and wellness of a diverse group of individuals while recognizing variations in their own values and biases.

Prerequisite: Entrance in the Practical Nursing Program.  
Corequisite: NONE. Crosslisted as: NONE.

**NURS 180 - Variations of Health and Wellness I (5)**

Introduction to pathophysiology, pharmacology, and disease processes as it relates to the care of individuals experiencing common medical/surgical conditions across the lifespan, including pediatric and child-bearing individuals. Emphasizes the theory of culturally centered individual care, management of care, nutrition, diagnostic testing, the nursing process, documentation, clinical judgment, critical thinking, teamwork, safety, and professional decision making within the practical nursing scope of practice.

Prerequisite: Successful completion of NURS 170, NURS 171, NURS 172 and NURS 173. Corequisite: None.  
Crosslisted as: None.

**NURS 181 - Variations in Health and Wellness I Lab  
(2)**

Students will learn, practice, and demonstrate nursing concepts and skills related to the care of individuals experiencing common medical/surgical conditions across the lifespan. Includes focused assessments, medication administration, documentation, dosage calculation competency, communication using evidence-based tools and hands-on skills related to oxygenation and elimination.

Prerequisite: Successful completion of NURS 170, NURS 171, NURS 172 and NURS 173. Corequisite: None.  
Crosslisted as: None.

**NURS 182 - Variations in Health and Wellness I  
Clinical/Simulation (5)**

Students will observe and demonstrate nursing concepts and skills related to the care of individuals across the lifespan experiencing common medical/surgical conditions in the healthcare and simulation settings. Includes applying skills and knowledge related to safe nursing practice, clinical judgement and cultural consciousness.

Prerequisite: Successful completion of NURS 170, NURS 171, NURS 172 and NURS 173. Corequisite: None.  
Crosslisted as: None.

**NURS 186 - Psychosocial Issues in Nursing I (3)**

Students will develop strategies for the support of the emotional, mental and social wellbeing of individuals.

Prerequisite: Successful completion of NURS 170, NURS 171, NURS 172 and NURS 173. Corequisite: None.  
Crosslisted as: None.

**NURS 190 - Variations in Health and Wellness II (5)**

Students will continue to study pathophysiology, pharmacology and disease processes as each relates to the care of individuals experiencing more common complex medical/surgical conditions across the lifespan. Students learn to apply principles of culturally-centered individual care, management of care, nutrition, the nursing process, documentation clinical judgment, critical thinking, teamwork, safety and professional decision within the practical nursing scope of practice.

Prerequisite: NURS 180, NURS 181, NURS 182 and NURS 186. Corequisite: NONE. Crosslisted as: NONE.

**NURS 191 - Variations in Health and Wellness Lab II  
(1)**

Students will learn, practice and demonstrate nursing concepts and skills related to the care of individuals experiencing more common complex medical/surgical conditions. Includes phlebotomy techniques, IV insertion skills, pumps, EKG readings, post-mortem care, documentation, dosage calculation competency, and communication using evidence-based tools.

Prerequisite: Successful completion of NURS 180, NURS 181, NURS 182, NURS 186. Corequisite: NONE.  
Crosslisted as: NONE.

**NURS 192 - Variations in Health and Wellness  
CLIN/SIM II (6)**

Students will observe and demonstrate nursing concepts

and skills related to the care of individuals, including pediatric and reproductive individuals, experiencing more common complex conditions in the healthcare and simulation settings. Includes utilizing the EHR for documentation, practicing evidence-based nursing skills and communicating with the healthcare team.

Prerequisite: Successful completion of NURS 180, NURS 181, NRUS 182, NURS 186. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 194 - Ethics and Policy in Nursing I (2)**

Students will learn to carry out nursing responsibilities utilizing ethical and legal principles that maintain dignity and respect to individuals seeking care. Topics include laws, ethics and policies around patient care as well as licensing for transition students.

Prerequisite: Successful completion of NURS 180, NURS 181, NRUS 182, NURS 186. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 270 - Variations in Health and Wellness III (5)**

This course is designed to build on the practical nurse's knowledge and skills related to individuals experiencing various medical/surgical conditions across the lifespan. Students will be introduced to the registered nursing scope of practice, implement the nursing process, act as manager of care, assist in adaptive care, document findings and utilize principles of pathophysiology, pharmacology and nutrition.

Prerequisite: Entry into the LPN-RN Program. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 271 - Variation in Health and Wellness Lab III (1)**

Students will learn, practice and demonstrate nursing concepts and skills related to the care of individuals experiencing medical/surgical conditions across the lifespan. Includes IV push medication administration, newborn, pediatric, and post-partum assessments, documentation of individuals experiencing acute conditions, and blood transfusions.

Prerequisite: Entry into the LPN-RN Program. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 272 - Variation in Health and Wellness Clinical/SIM III (4)**

Students will observe and apply nursing concepts and skills related to the care of individuals across the lifespan experiencing acute conditions in the healthcare and

simulation settings. Includes transition to the role of RN, creating nursing care plans, and an introduction of delegation and prioritization as the registered nurse.

Prerequisite: Successful completion of NURS 270 and NURS 271. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 273 - Variations in Pediatric and Reproductive Health (2)**

Students will explore changes and conditions related to fertility, reproduction, menstruation and sexual variations throughout the lifespan; including variations in pediatric health.

Prerequisite: Successful completion of NURS 270 and NURS 271. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 274 - Ethics and Policy in Nursing II (3)**

Students will explore advanced ethical and legal principles that maintain dignity and respect to individuals seeking care.

Prerequisite: Successful completion go NURS 270 and NURS 271. Corequisite: none. Crosslisted as: none.

### **NURS 280 - Variations in Health and Wellness IV (5)**

This course is designed to build on the practical nurse's knowledge and skills related individuals experiencing the most complex medical/surgical conditions across the lifespan. Students will focus on applying the nursing process as a registered nurse, acting as manager of care, assisting in adaptive care, documenting findings and utilizing principles of pathophysiology, pharmacology and nutrition.

Prerequisite: Successful completion of NURS 272, NURS 273 and NURS 274. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 281 - Variations in Health and Wellness Lab IV (1)**

Students will utilize learned nursing skills related to the care of individuals experiencing the most complex medical/surgical conditions in lab settings. Includes chest tubes, care of central lines, central line blood draws and medication administration, advanced EKG interpretation, and TPN.

Prerequisite: Successful completion of NURS 272, NURS 273 and NURS 274. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 282 - Variations from Health and Wellness Clinical/SIM IV (4)**

Students will observe and apply nursing concepts and skills related to the care of individuals experiencing the most complex medical/surgical conditions across the lifespan. Includes application of nursing knowledge, critical thinking, care planning, and further exploration of the role of the RN, delegation and prioritization.

Prerequisite: Successful completion of NURS 280, NURS 281 and NURS 286. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 285 - Transition to Professional Nursing Practice (2)**

Students will be prepared for the transitional process from LPN to the professional registered nurse role. Includes an in-depth look at the role of the registered nurse as a member of the healthcare team, critical thinking, clinical judgement and additional practice with communication and safety principles while caring for individuals across the lifespan.

Prerequisite: Successful completion of NURS 280, NURS 281 and NURS 286. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 286 - Psychosocial Issues in Nursing II (2)**

Students will learn the impact of psychosocial issues across the lifespan with an emphasis on managing individuals with acute mental health conditions.

Prerequisite: Successful completion of NURS 272, NURS 273 and NURS 274. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 292 - Transition to Nursing Practice Clinical (5)**

Students will apply cognitive and affective skills to demonstrate safe nursing practice in a healthcare setting. The transitioning nursing student will demonstrate essential nursing skills such as safe individual care, cultural consciousness, evidence-based practice, clinical reasoning, scope of practice, proper delegation and prioritization in the clinical/simulation settings.

Prerequisite: Successful completion of NURS 282 and NURS 285. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 293 - Communication in Healthcare II (3)**

Students will learn communication strategies to promote collaboration within the interdisciplinary team. Students will also assess their own values and biases as they

examine health and wellness within our diverse communities.

Prerequisite: Successful completion of NURS 282 and NURS 285. Corequisite: NONE. Crosslisted as: NONE.

### **NURS 295 - Professional Nursing Concepts (1)**

Students will explore professional nursing concepts related to real-world healthcare trends and professional issues. A focus on evidenced-based practices, nursing management, leadership and nursing care of individuals in an ever-changing healthcare environment will be explored.

Prerequisite: Successful completion of NURS 282 and NURS 286. Corequisite: NONE. Crosslisted as: NONE.

## **NUTR - Nutrition**

### **NUTR& 101 - Nutrition (5)**

An exploration of macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals) and their role in growth, development, and optimal health throughout the lifespan. A study in the anatomy and physiology of the gastrointestinal tract and its relation to digestion, absorption, and metabolism of nutrients will be completed. Students will explore the role of nutrition in preventing nutrition-related diseases. A healthy dietary plan will be developed to assist students in making healthy changes in their nutritional status for themselves and other members of their community.

Prerequisite: None. Corequisite: None.

## **OPM - Bachelor of Applied Science in Operations Management**

### **OPM 312 - Forecasting and System Design (5)**

Introduces students to forecasting and capacity planning tools for manufacturing and service organizations. Covers the selection of appropriate processes and facility layouts, the design of work systems, and maintenance planning.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

### **OPM 313 - Quality Management (5)**

Equips students with the tools used to plan, implement, and manage quality management programs, with special emphasis on process documentation, staff training, and communication of results to management and auditors.

Prerequisite: Successful completion of MAT 311 or

instructor's permission.

### **OPM 314 - Logistical Planning & Supply Chain Management (5)**

Introduces students to the complexities of domestic and global supply chains, including consideration of make/buy and outsourcing decisions. Explores the importance of the inventory control and procurement functions and discusses the use of materials resource planning (MRP), manufacturing resource planning (MRPII), and enterprise resource planning (ERP) systems.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

### **OPM 315 - Lean Concepts and Applications (5)**

Introduces students to the theory behind Lean, including concepts such as value stream mapping, workplace organization and standardization, 5-S and cellular flow. Covers Lean terminology, including Kan Ban and total production maintenance, and tools, such as gap analysis, 5 Whys

Prerequisite: Successful completion of MAT 311 or instructor's permission.

### **OPM 411 - Facility Layout and Materials Handling (5)**

Covers the design and optimal layout of industrial facilities, materials handling systems, and warehousing for the most efficient flow of raw materials, work-in-process, and completed product.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

### **OPM 412 - Workplace Health and Safety Management (5)**

Provides a foundation for students to take on responsibility for the management of health and safety in the workplace. Covers OSHA and the inspection process, identification of safety hazards and implementation of preventative measures, and developing a formal health and safety training program.

Prerequisite: Successful completion of MAT 311 or instructor's permission.

### **OPM 491 - Focused Study I (5)**

Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member

and/or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.

Prerequisite: Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

### **OPM 492 - Focused Study II (5)**

Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.

Prerequisite: Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

### **OPM 493 - Focused Study III (5)**

Provides students with an opportunity to explore an area of professional interest and to develop a greater understanding of that area through focused study and applied research under the direction of a faculty member and/ or industry mentor. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director, and each course will require both a written report and an oral presentation of the research findings.

Prerequisite: Successful completion of MAT 311, OPM 312, ENG 310, and instructor's permission.

### **OPM 495 - Internship (5)**

This course may be substituted for OPM 498-Individual Capstone (with instructor permission). Provides students with practical on-the-job experience, and offers students a way to combine classroom study with related work experience under the supervision of an employer. Work experience must be related to the student's educational and career objectives in the field of Manufacturing Operations. Includes a weekly seminar component. Students must submit, at or before registration, a description of the proposed internship, signed by the employer, the instructor and the student.

Prerequisite: Successful completion of OPM 492 or instructor permission.

### **OPM 498CAP - Individual Capstone Project (5)**

Involves the self-directed execution of a project in the field of operations management, employing elements from many of the courses the student has already taken linked together in a methodical, systematic way. The topic to be studied will be agreed on in conjunction with program faculty and approved by the program director. The course requires both a written report and an oral presentation of the project results.

Prerequisite: Successful completion of OPM 491 and OPM 492.

### **OPM 499CAP - Group Capstone Project (5)**

Involves working as a team on a project in the field of operations management. The topic to be studied will be chosen by the group, agreed on in conjunction with program faculty, and approved by the program director. The project may be carried out with an industry partner/ employer. The course requires a written project report, an oral presentation of the project results by the group, and individual summary reports by each student.

Prerequisite: Successful completion of OPM 491 and OPM 492.

## **PHIL - Philosophy**

### **PHIL 310DIV - Professional Ethics (5)**

This course increases students' awareness of ethical dilemmas that might occur at work to show how such ethical issues are subject to management analysis and decision-making action and to provide students with the conceptual tools necessary to identify and develop an acceptable resolution to these dilemmas.

Prerequisite: Successful completion of ENGL& 101.

## **PHYS - Physics**

### **PHYS& 114 - General Physics I with Lab (5)**

Covers problem-solving concepts in physics, including one- and two-dimensional kinematics, force, Newton's laws of motion, uniform circular motion, universal gravitation, work, energy, linear momentum, rotational motion, and angular momentum in an algebra-based approach.

Prerequisite: Successful completion of MAT 099.

### **PHYS& 221 - Engineering Physics I (6)**

The first quarter of a three-quarter sequence in calculus-based physics for science and engineering students. The course covers topics in mechanics, including kinematics of motion, force, work, energy, momentum, and kinematics & dynamics of rotation. Lab included.

Prerequisite: Successful completion or concurrent enrollment of MATH& 152.

### **PHYS& 222 - Engineering Physics II (6)**

The second quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of equilibrium of rigid bodies, properties of solids, gravity, fluid mechanics, heat, thermodynamics, waves, sound and light. Lab included.

Prerequisite: Successful completion of PHYS& 221.

## **POLS - Political Science**

### **POLS 180 - Critical Issues in World Politics (5)**

Examination of enduring political issues as well as political processes and institutions. Special emphasis is placed on studying some of the most pressing international issues facing the world today including war, global power shifts, democracy promotion, intervention, development, non-state actors such as multinational corporations and terrorist groups, security, and global issues.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

### **POLS& 202 - United States Government (5)**

A survey of the structure and process of the United States politics and government, including the structure and function of the executive, legislative, and judicial branches and the political party system. Special emphasis is placed on the relationship between political culture, thought, institutions, and the debate over public policy. Students will also learn how to become more active participants in civil society.

Prerequisite: Successful completion of ENG 094 or appropriate placement.

## **PSY - Psychology**

### **PSY 112DIV - Psychology of the Workplace (5)**

Introduces general psychological principles and their application to the workplace, emphasizing critical thinking

with regard to self-awareness, interpersonal relations, motivation, and teamwork.

Prerequisite: Successful completion of ENG 094 or equivalent.

## PSYC-Psychology

### **PSYC& 100DIV - General Psychology (5)**

Surveys the knowledge and methods of the discipline of psychology. Presents a broad view of this subject and establishes the foundation for further study of the discipline. Emphasis will be placed on applying psychological knowledge to daily situations and on accessing and assessing information about behavior from a variety of sources. Skills in scientific reasoning and critical thinking will be developed.

Prerequisite: Successful completion of ENG 094 or equivalent.

### **PSYC& 200 - Lifespan Psychology (5)**

Introduces the milestones of human development from conception to death. It describes the physical, cognitive, and social growth of people, with special attention to various cultural contexts of development and the rich diversity of individuals. The content is drawn from research and theories in developmental psychology. Students are expected to integrate their personal experiences, knowledge of psychology, and their observations of human development with the content of this course. Implications for parenting, education, and social policy making will be discussed, so that students may apply course information to meaningful problems.

Prerequisite: Successful completion of PSYC& 100.

### **PSYC& 220 - Psychological Disorders (5)**

A study of the development and symptoms of mental health disorders. Topics covered include schizophrenia, mood disorders, anxiety disorders, personality disorders, psychosomatic disorders, sexual deviation, organic disorders, and the process of adjustment to stress. Attention is given to biosocial, cognitive, and cultural factors and their role in mental health.

Prerequisite: Successful completion of PSYC& 100 or equivalent.

### **PSYC 311DIV - Industrial & Organizational Psychology (5)**

Examines how people behave and interact with each other

at work, with an emphasis on the way that this affects job performance. Topics covered in this course include the development of leadership skills, recruitment and retention, motivation and team building, managing change, and conflict resolution.

Prerequisite: Successful completion of ENGL& 101.

## PT - Pharmacy Technician

### **PT 120 - Pharmacology Part I (5)**

This course explores drug action mechanisms, the routes of administration, and the effects on body systems. Emphasis is placed on the uses, effects and side effects of the major drug classes.

Prerequisite: Ability to speak, read, and write the English language. Placement into college level English and math. Corequisite: PT 121, PT 122, PT 137.

### **PT 121 - Introduction to Pharmacy & Pharmacy Law (5)**

Orients students to the work of pharmacy technicians and the context in which technicians' work is performed. Covers the study of pharmacy law as it pertains to the practice of pharmacy in the state of Washington compared to the United States as a whole.

Prerequisite: Ability to speak, read, and write the English language. Placement into college level English and math. Corequisite: PT 120, PT 122, PT 137.

### **PT 122 - Generic Drug Names Part I (2)**

This course will begin the introduction of the top 200 drugs prescribed in the United States each year.

Prerequisite: Ability to speak, read, and write the English language. Placement into college level English and math. Corequisite: PT 120, PT 121, PT 137.

### **PT 133 - Pharmaceutical Calculations (3)**

Math specific to the practice of pharmacy will be explored.

Prerequisite: Successful completion of PT 121, PT 120, PT 122 and PT 137.

### **PT 134 - Pharmacy Lab (4)**

Prescription filling with counting, keyboarding, packaging, stocking, and labeling will be covered. Emphasis will be on nonsterile compounding following USP 795 guidelines. Introduction to hospital training and sterile compounding following USP 797 guidelines will be

explored.

Prerequisite: PT 120, PT 121, PT 122, PT 137.

### **PT 136 - Pharmacology Part II (5)**

Continues the exploration of drug action mechanisms, the routes of administration, and the effects on body systems. Emphasis is placed on the uses, effects and side effects of the major drug classes.

Prerequisite: Completion of PT 121 Introduction to Pharmacy and Pharmacy Law, PT 120 Pharmacology Part 1, PT 122 Generic Drug Names Part 1, and PT 137 Community Practice with lab courses with a C or above in all courses. Corequisite: None.

### **PT 137 - Community Practice with Lab (3)**

Introduces the community pharmacy experience. Customer service will be explored.

Prerequisite: Ability to speak, read, and write the English language. Placement into college level English and math. Corequisite: PT 121, PT 122, PT 120.

### **PT 138 - Generic Drug Names Part II (2)**

This course will continue the exploration of the top 200 drugs prescribed in the United States each year.

Prerequisite: Completion of PT 120 Pharmacology Part 1, PT 122 Generic Drug Names Part 1, PT 137 Community Practice with Lab, and PT 121 Introduction to Pharmacy and Pharmacy Law with a C or above in all courses. Corequisite: None.

### **PT 139 - Hospital Practice (5)**

Introduces the differences between hospital practice and community pharmacy practice. Students will learn about inpatient drug distribution systems, unit dose systems, formularies, and specialized services.

Prerequisite: PT 133, PT 138, PT 136, PT 134.

### **PT 146 - Medication Research (3)**

Advanced research of medications and the diseases they treat.

Prerequisite: PT 133, PT 138, PT 136, PT 134.

### **PT 158 - Clinical Capstone Research (4)**

This course explores professionalism and clinical readiness.

Prerequisite: PT 139, PT 146, PT 169.

### **PT 163CAP - Community Pharmacy Clinical Capstone (7)**

Provides 5 1/2 weeks of clinical training in a community pharmacy. Students will put into practice skills learned in the classroom by arranging an internship with a community pharmacy. Students and faculty collaborate in arranging community practice sites. Students are directly supervised by a pharmacist preceptor and their staff, with ongoing contact with the instructor in the form of site visits and seminars.

Prerequisite: Successful completion of PT 120, PT 121, PT 122, PT 137, PT 133, PT 134, PT 136, and PT 138 with a C or above in all those courses.

### **PT 164 - Advanced Pharmacy Practice (6)**

Advanced pharmacy trends and topics will be explored.

Prerequisite: PT 139, PT 146, PT 169.

### **PT 165CAP - Institutional Clinical Capstone (7)**

Students will spend 5 1/2 weeks in an institutional pharmacy setting. While in this capstone experience, students will perform the duties of an institutional pharmacy technician under the direct supervision of a pharmacist preceptor. There will be ongoing contact with the instructor in the form of site visits and seminars.

Prerequisite: Successful completion of PT 120, PT 121, PT 122, PT 137, PT 133, PT 134, PT 136, PT 138, PT 139, PT 146, PT 169, PT 158, PT 164, and PT 167 with a C or above in all those courses. Corequisite: None.

### **PT 167 - Advanced Lab (4)**

Students will apply techniques learned to prepare advanced sterile compounded products. Emphasis will be on aseptic technique using USP 797 and USP 800 guidelines. Advanced hospital skills will be explored.

Prerequisite: PT 139, PT 146, PT 169.

### **PT 169 - Hospital Lab (4)**

Students will apply techniques learned to prepare sterile compounded products. Emphasis will be on aseptic technique and USP 797. Students will learn how to use inpatient drug distribution systems and unit dose systems.

Prerequisite: PT 133, PT 138, PT 136, PT 134.

## RBM - Retail Business Management

### **RBM 105 - Fundamentals of Organizational Behavior (3)**

Emphasizes the human factor in business, the job of the supervisor, human relations, the art of leadership and converting policy into action, job analysis and performance, how and when to discipline, and effective supervising techniques for a diverse workplace.

### **RBM 107 - Marketing (3)**

Discover the methods and techniques of marketing research and the principles on which they are based. Includes the elements of the research process, evaluation, and effective presentation of findings.

### **RBM 109 - Principles of Retailing (3)**

Provides an introduction to retail management operations and merchandising. Covers retail target markets, trading area analysis and site selection, retail organization, buying, handling financial management of merchandise, development of retail image, customer service, and control of retail operations.

### **RBM 111 - Essentials of Business Communication (3)**

Prepares students to communicate effectively in business settings by helping them develop superior written and oral communication skills. This course focuses on traditional and web-based forms of communication, as seen in business today, including email, letters, memos, reports, proposals, and presentations. Upon completion of Business Communications, students will know how to plan, write, and revise communications for a variety of audiences, both in print and online.

### **RBM 113CL - Business Technology for Retail Applications (3)**

Gain hands-on experience with the fundamentals of Microsoft Office, such as entering data, formatting, copying and pasting, basic formula construction, auto summing and more. This course will not only teach you the basics of Office but will also teach you the thinking and mechanics of how to apply it to your everyday retail problems.

### **RBM 115 - Human Resource Management (3)**

Identify the role of human resource management, including its scope and responsibilities. Students will examine the principles and methods used in the recruitment, selection, placement, and training of employees. Major laws, trends, and issues related to human resource administration will be

discussed.

### **RBM 117 - Principles of Management (3)**

Learn essential skills for operating an effective business. Topics include employee productivity, project management, human resources and job design, forecasting, statistical process control, and supply chain management.

### **RBM 119 - Financial Management (3)**

Introduces students to key financial management topics that give insight into the issues and challenges facing retail managers on a daily basis. Topics include ordering inventory management, scheduling, and analyzing profit and loss statements. This course delivers the solid understanding of financial management that a business student needs for future success.

### **RBM 123 - Customer Service (5)**

Introduces concepts of effective customer service, step-by-step suggestions for improving communication, and valuable references for delivering exceptional internal and external customer service skills.

### **RBM 129 - Speaking for Success (5)**

Theory and practice in composing and presenting oral business communications, both impromptu and prepared. Effective writing of business documents, methods of research, and presentation of oral class reports.

### **RBM 133 - Effective Selling (5)**

Nature and scope of selling and understanding buying motives, with strong emphasis on the selling process, prospecting, pre-approach, demonstration of products and services, and closing. While we use the traditional selling tenets as a foundation, this course adapts the concepts to the rapidly changing world of business in today's environment, including the use of Twitter, LinkedIn, Facebook, blogs, wikis, and other interactive ways of connecting with customers.

### **RBM 159 - E-Commerce Principles & Applications (4)**

This introduction to the world of electronic commerce provides the tools necessary to understand and capitalize on the explosion of Internet-based business in today's economy. Study the technologies used to create new opportunities for business-to-business and business-to-customer services.

### **RBM 162 - Social Media Marketing (5)**

Social Media Marketing will give you a practical approach to developing successful social media marketing plans.



Students will learn how to analyze effective and ineffective ways to market various products to achieve desired marketing outcomes.

### **RBM 164 - Marketing Communications (5)**

Developed with real world examples to illustrate the concepts of promotion and give students a glimpse into industry and the challenges it faces. This course will introduce concepts on developing a target market, how to find your target market, and how to effectively build relationships through research and branding to the company's core customer.

### **RBM 166CAP - Successful Career Development (5)**

Participate in self-analysis, goal setting, career exploration, personal appearance and grooming; resume writing, application letter writing, and the employment interview; and communication of ideas, interviewing practice, and other techniques of successful career development.

### **RBM 168 - Consumer Behavior (5)**

Introduction to the core concepts and applications of contemporary consumer behavior as it is practiced today with the latest consumer behavior statistics, examples, and trends. This course emphasizes how the recent recession, green marketing, and natural disasters all impact contemporary consumer behavior.

### **RBM 201 - Introduction to Business Etiquette (5)**

A professional class designed to give an understanding of business etiquette. Put your best professional foot forward with Introduction to Business Etiquette. This course covers all the important issues and concepts without confusing students with excess material. This class covers basic digital etiquette and provides information on how to create and maintain business relationships.

## **REST - Culinary Arts - Restaurant Management**

### **REST 103 - Food & Beverage Cost Control (4)**

Outlines the fundamentals of food costing in relation to writing menus. Students will be responsible for pricing out each item on the menu, as well as preparing yield tests and standardizing recipes.

Prerequisite: None.

### **REST 107CAP - Kitchen & Dining Management (3)**

Prepares students to be responsible for specific operational procedures involved in running a

kitchen and dining room. This includes receiving and storage of product, invoicing, inventory management, position planning, crew hiring and evaluations for all kitchen positions.

Prerequisite: None.

### **REST 112 - Restaurant Dining (7)**

Familiarizes students with all aspects of running a casual-style dining room open to the public. Included are opening/closing procedures, table setup, customer-service techniques, leadership, sanitation, and safety, proper cash handling and sales techniques.

Prerequisite: None.

### **REST 113 - Restaurant Dining & Customer Service (5)**

Familiarizes students with all aspects of running a full service casual dining room that is open to the public. Included are opening/closing procedures, table set up, customer service, leadership, safety and sanitation, proper cash handling, and sales techniques.

Prerequisite: None.

### **REST 119 - Operations Management (4)**

Explore all aspects of running a successful operation in the hospitality industry. Students will learn leadership skills, team building, and how to create a positive work environment. Students will also learn hiring procedures, how to recruit new team members, how to organize and implement systems and controls, and how to handle issues that arise daily. Students will also explore how to use Excel and the benefits of using Excel for restaurants.

Prerequisite: None.

### **REST 124 - Restaurant Bookkeeping (4)**

Introduces essential bookkeeping principles of the hospitality industry including statements of cash flow, balance sheets, income statements, budgeting, and the ethical responsibilities of accounting.

Working knowledge of computer literacy to include file management, storage, browsers, and Excel recommended.

PC computer and internet access required.

Prerequisite: None. Corequisite: None.

**REST 133 - Beverage Service Management (4)**

Learn to successfully set up and manage a beverage service operation. Includes the history of bar service, beverage-making ingredients and processes, safety, and sanitation in the bar.

**SBS - Construction Technologies****SBS 107 - Sustainability Building Basics (4)**

Overview of sustainable green" building models with a focus on energy indoor health natural resources and other environmental impact."

**SBS 121 - Survey of Energy Ratings (3)**

Introduction to the current and emerging efficiency standards for measuring energy usage and consumption, including but not limited to Energy Star, BPI, LEED, Built Green, etc.

Prerequisite: Instructor's permission.

**SBS 130 - Alternative Energy Systems (5)**

An overview of existing and emerging approaches to energy production for use in residential and commercial structures, including but not limited to, solar/ photovoltaics, wind, geothermal, biofuels, etc.

**SBS 142 - Building Envelope (4)**

Introduction to the principles of heat, light, sound, moisture, and air movement within a residential structure, including an overview of external factors that impact a building's energy integrity.

**SBS 150 - Moisture Mitigation (3)**

Introduction to practices in construction that prevent moisture intrusion, as well as techniques for maintaining healthy living environments free from the destructive impacts of moisture.

**SBS 174 - Basic Diagnostics and Testing (4)**

Overview of the equipment, technology, systems, and software used to measure a building's energy usage and loss.

**SBS 185CAP - Service Learning Project (3)**

A capstone project that gives students an opportunity to apply their sustainable building science knowledge in a real-life setting, focusing on helping nonprofit organizations achieve sustainability in the buildings where they live, work, and serve the public.

**SOC - Sociology****SOC& 101DIV - Introduction to Sociology (5)**

Focuses on understanding and applying the sociological perspective, which stresses the importance of the impact of social forces external to the individual in shaping people's lives and experiences. Topics studied will include socialization, social interaction, culture, groups, social structure, deviance, social inequality, social class, race, gender, institutions (political, economic, educational, and family), collective behavior, and social change. Students will be asked to learn the basic concepts, theories, and perspectives of sociology; to see how these operate in terms of social processes, structures, and events; and to apply this knowledge to better understand the social world.

Prerequisite: Successful completion of ENG 094 or equivalent.

**SURG - Surgical Technology****SURG 113 - Introduction to Surgical Lab (8)**

Covers proper attire, hand hygiene, patient vitals, urinary catheterization, room set up, handling of sterile supplies, open gloving, gowning and gloving others, patient transport, introduction to patient positioning and introduction to surgical instrumentation. Creation and maintenance of a sterile field, introduction to draping of the surgical patient, introduction to the prep of the surgical patient, spacial awareness and movement within the sterile field. Introduction to the roles of first scrub and assistant circulator.

Prerequisite: Successful completion (B or better) of CMST& 220 or ENGL& 101 (only through Spring 2025), CAH 102, BIOL& 241, COLL 102. Corequisite: SURG 115 and SURG 120.

**SURG 115 - Introduction to the Surgical Environment (2)**

Explores the basics of surgical instrumentation, use of energy sources and guidelines to safe practices surrounding them, introduction to specimen handling, principals of aseptic technique, processes related to maintaining asepsis and hazards of the surgical environment.

Prerequisite: Successful completion of CMST& 220 or ENGL& 101 (only through Spring 2025), CAH 102, BIOL& 241, COLL 102. Corequisite: SURG 113, SURG 120.

### **SURG 120 - Care of the Surgical Patient I (2)**

Covers patient vitals and diagnostics; methods of patient identification, transfer, transport and positioning of surgical patients; theories of skin prep and draping; case planning and intraoperative routines.

Prerequisite: Successful completion of CMST& 220 or ENGL& 101(only through Spring 2025), CAH 102, BIOL& 241, COLL 102. Corequisite: SURG 113, SURG 120.

### **SURG 133 - Pharmacology & Anesthesia (5)**

Introduces the student to basic surgically related pharmacologic and anesthetic principles, including drug classification, proper medication labeling and handling, aseptic medication preparation and usage, principles of anesthesia administration and monitoring, including complications and interventions.

Prerequisite: Successful completion of SURG 143, SURG 148, SURG 150, SURG 152, MAT 108 or MATH& 141, 142, 146. Corequisite: SURG 158, SURG 154.

### **SURG 143 - Surgical Lab I (8)**

Explores the operative environment, aseptic principles and practices, methodologies of opening sterile packages, preparation of the sterile field, positioning and prepping, scrub role, assistant circulator role, instruments, supplies, equipment, patient positions, incisions, draping, procedural steps and care of specimens, surgical counts, instrument handling, medication handling, suture handling, loading and unloading of blades, back table and mayo setups, room disinfection, turnover and termination.

Prerequisite: SURG 113 Introduction to the Surgical Lab SURG 115 Introduction to the Surgical Environment SURG 120 Care of the Surgical Patient I. Corequisite: SURG 148 Operating Room Theory I SURG 150 Surgical Environment SURG 152 Care of the Surgical Patient II.

### **SURG 148 - Operating Room Theory I (5)**

Explores the OR environment, instrumentation, equipment, supplies, patient positions, specimen care, postoperative considerations, abdominal incisions, surgical anatomy and procedures in minimally invasive systems, general, ob-gyn, and ophthalmic surgeries.

Prerequisite: SURG 113 Introduction to the Surgical Lab SURG 115 Introduction to the Surgical Environment SURG 120 Care of the Surgical Patient I BIOL& 242 Human A & P II. Corequisite: SURG 143 Surgical Lab I SURG150 Surgical Environment SURG 152 Care of the

Surgical Patient II.

### **SURG 150 - Surgical Environment (2)**

Explore the history of surgical technology, career opportunities, communication skills, and the effects of teamwork, law, ethics, documentation, and the health care facility environment. Identify different types of emergencies and how they impact the surgical unit.

Prerequisite: SURG 113 Introduction to the Surgical Lab SURG 115 Introduction to the Surgical Environment SURG 120 Care of the Surgical Patient I. Corequisite: SURG 143 Surgical Lab SURG 148 Operating Room Theory I SURG 152 Care of the Patient II.

### **SURG 152 - Care of the Surgical Patient II (2)**

Covers the physical, and biophysical needs of the patient and religious and cultural influences. Methods of handling death and dying, and the ethical issues surrounding death and dying. Explores the processes related to management and care of the surgical wound, including hemostasis, sutures, dressings, drains and application of various types of dressings. Discusses the anatomy and physiology related to which type of diagnostics will be useful, which diagnostics are invasive, requiring sterile technique and recognize major indicators for surgical intervention

Prerequisite: SURG 113 Introduction to the Surgical Lab SURG 115 Introduction to the Surgical Environment SURG 120 Care of the Surgical Patient I. Corequisite: SURG 143 Surgical Lab I SURG 148 Operating Room Theory I SURG 150 Surgical Environment.

### **SURG 154 - Operating Room Theory II (5)**

Continued exploration of surgical specialties to include otorhinolaryngologic, oral/ maxillofacial, plastic/reconstructive, and genitourinary surgeries along with surgical anatomy, instrumentation, equipment, supplies, patient positions, specimen care and postoperative considerations.

Prerequisite: SURG 143 Surgical Lab I SURG 148 Operating Room Theory I SURG 150 Surgical Environment SURG 152 Care of the Surgical Patient II. Corequisite: SURG 158 Surgical Lab II SURG 133 Pharmacology & Anesthesia.

### **SURG 158 - Surgical Lab II (8)**

Covers intermediate level skills for the OR environment, aseptic principles and practices, scrubbing, gowning, gloving, preparation of the sterile field, disinfection and

sterilization, scrub role, assistant circulator role, instrumentation, supplies, equipment, patient positions, draping, incisions, procedural steps, and care of specimens as appropriate for the third quarter.

Prerequisite: SURG 143 Surgical Lab I SURG 148 Operating Room Theory I SURG 150 Surgical Environment SURG 152 Care of the Surgical Patient II. Corequisite: SURG 133 Pharmacology & Anesthesia SURG 154 Operating Room Theory II.

### **SURG 160 - Care of the Surgical Patient III (2)**

Explores disaster readiness, sterility, disinfection, steps for reprocessing instruments, decontamination of surgical environment, and the use of technology within the surgical environment.

Prerequisite: Successful completion of SURG 145, SURG 148, SURG 150, SURG 152, and MAT 108 or Higher (MAT&).

### **SURG 201 - Operating Room Theory III (5)**

Continued exploration of surgical specialties to include orthopedic, cardiothoracic, peripheral vascular, and neurosurgery along with surgical anatomy, instrumentation, equipment, supplies, patient positions, specimen care and postoperative considerations.

Prerequisite: SURG 133 Pharmacology & Anesthesia SURG 158 Surgical Lab II SURG 154 Operating Room Theory II, SURG 160, and SOC& 101. Corequisite: SURG 210 Surgical Lab III SURG 205 Clinical Preparation SURG 213 Microbiology for the Surgical Technologist.

### **SURG 205 - Clinical Preparation (2)**

Students will earn HIPAA and Blood Borne Pathogens certificates, and complete all paperwork related to attending clinical rotation.

Prerequisite: SURG 133 Pharmacology & Anesthesia SURG 158 Surgical Lab II SURG 154 Operating Room Theory II SOC& 101 or Psych& 100 or Psych 112 CPR for Health Care Providers. Corequisite: SURG 210 Surgical Lab III SURG 201 Operating Room Theory III SURG 213 Microbiology for the Surgical Technologist.

### **SURG 210 - Surgical Lab III (8)**

Pre-clinical level lab for practice of aseptic principles and practices, scrubbing, gowning, gloving, and preparation of the sterile field. Will practice draping patient, placing multiple types of drains and patient positioning. Demonstrate critical thinking skills and prioritizing the

situations and corrections of contamination. This course will cover care of specimens, and the roles of the second scrub and the assistant circulator.

Prerequisite: SURG 158 Surgical Lab II SURG 154 Operating Room Theory II SURG 133 Pharmacology & Anesthesia. Corequisite: SURG 201 Operating Room Theory III SURG 205 Clinical Preparation SURG 213 Microbiology for the Surgical Technologist.

### **SURG 213 - Microbiology for the Surgical Technologist (5)**

Explores the relationship of microbiology and surgical practice, types and identification process of various microbes, cell structure of microbes, and disease process of microbes.

Prerequisite: SURG 153, 154 and 128. Corequisite: SURG 201, 205 and 212.

### **SURG 215 - Clinical Applications I (5)**

Provides the framework for students to receive experience in the operating room. Through one-on-one training in a perioperative setting, students will develop the professional attitude, behavior and skills to reinforce their role as a member of the perioperative team.

Prerequisite: SURG 210 Surgical Lab III SURG 201 Operating Room Theory III SURG 205 Clinical Preparation SURG 213 Microbiology for the Surgical Technologist. Corequisite: SURG 220 Clinical Applications II SURG 235 Seminar I SURG 237 Certification Test Preparation I.

### **SURG 220 - Clinical Applications II (5)**

See Clinical Applications.

Prerequisite: SURG 210 Surgical Lab III SURG 201 Operating Room Theory III SURG 205 Clinical Preparation SURG 213 Microbiology for the Surgical Technologist. Corequisite: SURG 215 Clinical Applications I SURG 235 Seminar I SURG 237 Certification Test Preparation I.

### **SURG 225 - Clinical Applications III (5)**

See Clinical Applications.

Prerequisite: Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

### **SURG 230 - Clinical Applications IV (5)**

See Clinical Applications.

Prerequisite: Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

### **SURG 235 - Seminar I (3)**

Classroom presentations on health and wellness and death and dying. Classroom preparation for the NBSTSA Certification Exam.

Prerequisite: SURG 210 Surgical Lab III SURG 201 Operating Room Theory III SURG 205 Clinical Preparation SURG 213 Microbiology for the Surgical Technologist. Corequisite: SURG 215 Clinical Applications I SURG 220 Clinical Applications II SURG 237 Certification Test Preparation I.

### **SURG 237 - Certification Test Preparation I (2)**

Prepares students to take the NBSTSA National Certification Test.

Prerequisite: SURG 210 Surgical Lab III SURG 201 Operating Room Theory III SURG 205 Clinical Preparation I SURG 213 Microbiology for the Surgical Technologist. Corequisite: SURG 215, 220 and 235.

### **SURG 240CAP - Seminar II (3)**

Classroom presentations of employability skills, preoperative routines, and transportation. Classroom preparation for the NBSTSA Certification Exam.

Prerequisite: Successful completion of SURG 215, SURG 220, SURG 235, and SURG 237.

### **SURG 242 - Certification Test Preparation II (2)**

Prepares students to take the NBSTSA National Certification Test. Students will participate in the National Certification Test.

Prerequisite: Successful completion of SURG 201, SURG 215, SURG 220, SURG 235, and SURG 237.

## **SVL - College Success**

### **SVL 101 - Service Learning (3)**

Participate in organized service that addresses local community needs - specifically, the issue of poverty - while developing academic and professional skills. Work directly with community partners to link community activities and projects to academic growth and self-discovery through reflection. Relate service experience to local and global social issues, and broaden knowledge of your chosen profession. Requires a minimum of 20 hours of community service work in addition to class

assignments and activities.

## **UPH - Upholstery**

### **UPH 101 - Introduction to Upholstery I (4)**

Introduces tools and materials commonly used in the upholstery trade. Provides hands-on experience in proper use of various hand and power tools and their maintenance and storage. Students will learn how to set up an efficient work station.

### **UPH 103 - Introduction to Upholstery II (4)**

Introduces types of foam and fabrics along with their characteristics and uses in upholstery. Equips students with skills needed to design patterns, measure and calculate materials needed for an upholstery project. Continuation of skills learned in Introduction to Upholstery I.

### **UPH 105 - Basic Sewing I (4)**

Covers the setup and threading of commercial upholstery sewing machines. Provides a foundation for students to learn to sew on commercial machines with control and accuracy.

### **UPH 107 - Basic Sewing II (4)**

Focuses on building a foundation of sewing skills. Provides instruction introduction to troubleshooting and maintenance of commercial sewing machines. Introduces students to various machine stitches and their uses. Continuation of skills learned in Basic Sewing I.

Prerequisite: Instructor's permission.

### **UPH 109 - Intermediate Sewing I (4)**

Develop sewing skills, speed and accuracy by constructing cushions, pillows and automotive inserts.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

### **UPH 111 - Intermediate Sewing II (4)**

Continuation of sewing skills learned in Intermediate Sewing I. Increase speed and accuracy by constructing cushions, pillows and automotive inserts.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

### **UPH 113 - Advanced Sewing I (4)**

Provides students the opportunity to develop advanced sewing skills by constructing complex seats and custom

designs.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

#### **UPH 115 - Advanced Sewing II (4)**

Continuation of Advanced Sewing I to develop students' advanced sewing skills. Provides practical application of sewing skills on a 2015 Corvette seat frame or similar. Students will design a pattern, cut, sew, and fit a new upholstery cover for a seat back.

Prerequisite: Successful completion of UPH 101, UPH 103, UPH 105, UPH 107.

#### **UPH 118 - Doors and Quarter Panels I (4)**

Provides students the opportunity to apply practical design, sewing and upholstery skills to automotive doors and quarter panels. Students will learn to remove existing panels, design replacement pieces and prepare automotive interior for upholstery.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 120 - Doors and Quarter Panels II (4)**

Continuation of development of skills learned in Doors and Quarter Panels I. Instruction also includes reinstallation of upholstered vehicle door and quarter panels.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 122 - Bucket Seats I (4)**

Covers the removal of an automotive bucket seat as well as pattern and fabrication of a replacement seat cover and headrest covers. Provides students with the opportunity to apply knowledge and skills learned in design, measurement and sewing.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 124 - Bucket Seats II (4)**

Covers various sewing techniques for automotive bucket seat as well as preparation and fitting of upholstery covers for bucket seats and head rests. Students will also learn to reinstall automotive bucket seats and headrests after reupholstering. Continuation of skills learned in Bucket Seats I.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 126 - Bench Seats I (4)**

Covers the removal of an automotive bench seat as well as pattern and fabrication of a replacement seat cover and headrest covers. Provides students with the opportunity to apply knowledge and skills learned in design, measurement and sewing.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 128 - Bench Seats II (4)**

Covers various sewing techniques for automotive bench seats as well as preparation and fitting of upholstery covers for bench seats and head rests. Students will also learn how to reinstall automotive bench seats and headrests after reupholstering. Continuation of skills learned in Bench Seats I.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 132 - Headliners (4)**

Introduces fabrication of bow headliners, upholstery of hard shell headliners and installation and creation of matching sun visors.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 136 - Carpets (4)**

Covers removal of automotive carpet for replacement, preparation of the trunk and other interior areas, cutting and sewing new carpet and reinstallation of an automotive carpet.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

#### **UPH 140 - Convertible Tops (4)**

Students will learn how to disassemble a convertible top, fabricate top pads, prepare care and bows for a new top, and install a new top.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107,

UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 145 - The Art of Tying Springs (3)**

Students will learn how to install springs using eight-way tie and adjust to proper height.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 150 - Upholstering a Louis-Type Chair I (4)**

Covers professional upholstery techniques and skills needed to upholster a Louis-type chair, overview of materials and tools of furniture upholstery and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 155 - Upholstering a Louis-Type Chair II (4)**

Continuation of Upholstering a Louis-type Chair I, building on skills learned in UPH 150, including instruction on designing and sewing sofa skirts and furniture arm covers.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 160 - Upholstering a Wingback Chair I (4)**

Introduces skills needed to upholster a Wingback chair. Provides an overview of professional upholstery techniques, materials, tools, and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 165 - Upholstering a Wingback Chair II (4)**

Continues building on skills learned in Upholstering a Wingback Chair I course.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 170 - Upholstering a Sofa I (4)**

Covers professional upholstery techniques and skills needed to upholster a sofa, overview of materials and tools of furniture upholstery and best practices.

Prerequisite: Instructor Permission or successful

completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 175 - Upholstering a Sofa II (4)**

Continues building on skills learned in Upholstering a Sofa I course, includes instruction on designing and sewing sofa skirts and furniture arm covers.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 180 - Diamond Tufting (4)**

Create a diamond tufted sample board or furniture piece.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 183 - Pillow Backs (4)**

Fabricate a pillow back using essential patterning and sewing skills.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 189 - Design and Construction of a Headboard (4)**

Build a headboard using essential skills, professional upholstery techniques, tools and materials and best practices.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

### **UPH 200 - Special Projects (4)**

Students will develop skills in advanced and/or specialized techniques. Students will have the opportunity to apply knowledge to projects of personal interest as assigned and/or job shadowing. Learning outcomes will be written by the instructor and student on a case-by- case basis.

Prerequisite: Instructor Permission or successful completion of UPH 101, UPH 103, UPH 105, UPH 107, UPH 109, UPH 111, UPH 113, UPH 115.

## **WLD - Welding**

### **WLD 106 - Welding Theory (5)**

Introduces the tools and equipment used in welding. Includes safety considerations, electrical principles,

welding quality, and technical orientation for select welding and cutting processes.

### **WLD 110 - Thermal Cutting & Gouging (3)**

Develops the knowledge and skills for manual and machine-guided oxy-fuel cutting, manual plasma arc cutting, and carbon arc gouging.

Corequisite: instructor's permission.

### **WLD 114 - Industrial Machinery (4)**

Explores the use of safety proper set-up, the ability to change consumables and maintain the equipment, including drill press, vertical bandsaw, cold saw, horizontal saw, pipe beveller, iron worker, pipe roller, and shear.

Prerequisite: None. Corequisite: None.

### **WLD 117 - Shielded Metal Arc Welding I (7)**

Introduction to the shielded metal arc welding (SMAW) process, including: equipment safety and skill development using deep-penetrating electrodes in the flat, horizontal, vertical-up and overhead positions.

Corequisite: instructor's permission.

### **WLD 123 - Shielded Metal Arc Welding II (7)**

Develops further understanding with shielded metal arc welding (SMAW) process, including: equipment safety and skill development with low hydrogen electrodes (E7018) in the flat, horizontal, vertical-up and overhead positions.

Prerequisite: Successful completion of WLD 110, WLD 112, WLD 117, and instructor's permission.

### **WLD 143 - Materials and Testing (5)**

Covers welding processes and electrode selection, welder qualifications, and welding inspection.

### **WLD 144 - Print Reading for Welders (5)**

Covers interpretation of job drawing views and details including: dimensioning, orthographic projections, pictorial drawings and welding symbols.

### **WLD 152 - Gas Metal Arc Welding (7)**

Develops the ability to use the gas metal arc welding process to join carbon steels and aluminum with various joint designs in all positions.

Prerequisite: Successful completion of WLD 110, WLD

112, WLD 117, and instructor's permission.

### **WLD 157 - Metallurgy (5)**

Examines the properties, behavior and internal structures of metal and how they are effected by welding.

### **WLD 168 - Flux Cored Arc Welding I (7)**

Covers welding techniques in all positions for Flux Core Arc Welding with shielding gas in a variety of joint designs in all positions.

Prerequisite: Successful completion of WLD 123 and WLD 152 and instructor's permission.

### **WLD 210 - Gas Tungsten Arc Welding (7)**

Covers welding techniques in all positions for Gas Tungsten Arc Welding for a variety of steel and aluminum joint designs.

Prerequisite: Successful completion of WLD 123 and WLD 152 and instructor's permission.

### **WLD 211 - Advanced Gas Tungsten Arc Welding I (GTAW) (7)**

Covers welding techniques in all positions for Gas Tungsten Arc welding for a variety of light gauge steel and aluminum joint designs of aerospace quality.

Prerequisite: Successful completion of WLD 210 or instructor's permission.

### **WLD 220CAP - Special Projects I (7)**

Develop skills including: print reading, project planning, layout, distortion control, fixturing and other fabrication techniques. Students will have the opportunity to apply knowledge to the projects of personal interests or as assigned.

Prerequisite: None. Corequisite: None.

### **WLD 230 - Special Projects II (7)**

A continuation of WLD 220, closing the circle on print reading, fabrication, metallurgy, and welding by developing concepts to be made into working drawings, which will be used in fabricating a project. This process allows a student to further develop skills in print reading, project planning, layout methods, fixturing, distortion control, and the use of tools and equipment for metal fabrication. Students will have the opportunity to apply knowledge to projects of personal interest or as assigned.

Prerequisite: None. Corequisite: None.



### **WLD 214 - Advanced Gas Tungsten Arc Welding II (7)**

This course continues the exercises from WLD 211 welding techniques in all positions for Gas Tungsten Arc Welding for a variety of light gauge steel, aluminum (and exotic metals as available) joint designs of aerospace quality.

Prerequisite: Successful completion of or concurrent enrollment in WLD 211.

### **WLD 223 - GTAW Pipe Welding (7)**

Covers welding techniques required to make sound weld GTAW welds on steel plate and pipe in the 2G, 3G, 4G & 5G positions.

Prerequisite: Successful completion of WLD 210 or instructor's permission.

### **WLD 225 - Shielded Metal Arc Welding Pipe (7)**

Covers welding techniques required to make sound SMAW welds on steel plate (3G & 4G positions) and pipe (2G & 5G positions) using E6010 and E7018 electrodes.

Prerequisite: Successful completion of WLD 117, 123 or instructor's permission.

### **WLD 227 - Advanced Pipe Welding (7)**

Covers welding techniques required to make sound GTAW and SMAW welds on steel pipe (2G, 5G, 6G & 6GR positions) using ER70S filler rod, E6010 and E7018 electrodes.

Prerequisite: Instructor's permission.

### **WLD 229 - Metal Forming (7)**

Develops knowledge of safe metal forming methods with a variety of hands on projects utilizing smithing metal forming equipment and techniques.

Prerequisite: Successful completion of WLD 157 or instructor's permission.

### **WLD 233CAP - Layout and Fabrication (7)**

Covers layout and fabrication techniques required for building production welding projects from a plan. Project planning, layout methods, fixturing, distortion control and the use of tools and equipment for metal fabrication are also covered.

Prerequisite: Successful completion of WLD 144 or instructor's permission.

### **WLD 235CAP - WABO Test Prep (7)**

Develops skills in preparation for employer, Washington Association of Building Officials (WABO) or similar welder qualification tests in the 3G, 4G, 5G and 6G positions using a variety of welding processes.

Prerequisite: Instructor's permission.

### **WLD 299 CAP - Advanced Concept Design and Fabrication (7)**

Capstone course. In this course a student will take a project that they are interested in and develop a concept by looking at what others have done and customize this to their specific needs and design sensibilities.

You will devise a set of working drawings from which, you will come up with a list of materials and the amounts need.

With the working drawings complete a student will extrapolate a fabrication plan and welding procedures.

During fabrication a student will use fixtures that they have made to help keep progress move along smoothly. While building the project, they will track revisions in the design and fabrication plan.

When the project is completed the student will make a presentation to the welding program advisory committee. This will be a powerful portfolio piece for a student's resume.

Prerequisite: WLD 106, 143, 144, 157, 233 and/or instructor permission.

# Professional Development Programs / Corporate Education & Training

Individual or Employers interested in flexible training schedules may choose from a broad range of career or professional development training options.

Courses/programs may be offered in a traditional classroom environment, fully online, or hybrid format. Programs vary in length and may meet various industry requirements for continuing education or professional development.

Some programs are composed of a course or series of courses mapped to an industry-recognized certification or license. Curriculum and materials in these programs may be specified by or be the proprietary material of industry associations that assist students to prepare for proctored certification examinations. Other programs include training in skills necessary for specific entry-level job opportunities.

The menu of courses is subject to change as labor market demands change. The registration process and funding sources varies depending on whether the program is offered on a credit (degree), non-credit (non-degree) basis, or as employer-based training. Consult the relevant office for information about offerings.

- For individualized training and development solutions offered on a **non-degree basis, or if you are applying for training benefits through the Employment Security Dept (ESD)**, contact Career & Community Services at [www.cptc.edu/career-center](http://www.cptc.edu/career-center).
- For **organizational training and development solutions**, contact Corporate Education at [www.cptc.edu/corporate-education](http://www.cptc.edu/corporate-education).
- Information for all career, professional development, and corporate education & training can be found on the Clover Park website under Education and Training Programs of Study at [www.cptc.edu/programs/schools](http://www.cptc.edu/programs/schools)

# Policies and Procedures

## Academic Standards

Clover Park Technical College is committed to facilitating the academic success of students. The primary purpose of Academic Standards is to provide understanding of academic processes and procedures, which guides student progress through programs of study.

## Student Academic Responsibilities

Admission to Clover Park Technical College carries with it the understanding that students will conduct themselves as responsible members of the college community. This includes an expectation that students will obey appropriate laws, comply with the rules of the college and its departments, and maintain a high standard of integrity and honesty.

1. Dishonesty: Honest assessment of student performance is of crucial importance to all members of the college community. Acts of dishonesty are serious breaches of honor and shall be dealt with in the following manner:
  - a. It is the responsibility of the college administration and faculty to provide reasonable and prudent security measures designed to minimize opportunities for acts of dishonesty that occur at the college.
  - b. Any student who, for the purpose of fulfilling any assignment or task required by a staff member as part of the student's program of study, shall knowingly tender any work product that the student fraudulently represents to the staff member as the student's work product, shall be deemed to have committed an act of dishonesty. Acts of dishonesty shall be cause for disciplinary action and be subject to the processes described in the Code of Student Conduct WAC 495C-121-060.
  - c. Any student who aids or abets the accomplishment of an act of dishonesty, as described in sub-paragraph (b) above, shall be subject to disciplinary action.
  - d. This section shall not be construed as preventing an instructor from taking immediate disciplinary action when the instructor is required to act upon

such breach of dishonesty in order to preserve order and prevent disruptive conduct in the classroom. This section shall also not be construed as preventing an instructor from adjusting the student's grade on a particular project, paper, test, or class grade for dishonesty.

2. Classroom Conduct: Faculty members and instructional administrators are authorized to take appropriate action to maintain order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives. See Code of Student Conduct WAC 495c-121-070.
3. Any student who substantially disrupts any college class by engaging in conduct that renders it difficult or impossible to maintain the decorum of the class shall be subject to disciplinary action as defined in the Code of Student Conduct WAC 495C-121-050-070.

## Attendance Policy

The student is expected to attend all classes for which the student is registered in order to gain the maximum benefit. The instructor may establish an attendance policy for the program. It is the responsibility of the student to know and comply with the policy. Programs having established attendance policies will include relevant information in course syllabi. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

A student who is absent for the first two class sessions or misses the first two assignments in an asynchronous class without making arrangements with the instructor and/or does not comply with the established attendance policy for the class or program may forfeit the right to continue and may be subject to administrative withdrawal.

### Absence for Reasons of Faith or Conscience

#### POLICY

Per WAC 357-31-052, Clover Park Technical College will grant reasonable accommodation so that grades are not impacted for students who are absent for reasons of faith or conscience, or for an organized activity conducted under the auspices of a religious denomination, church, or religious organization.

Faculty must include the approved language referencing this policy in their syllabi.

This policy and the associated procedure will be posted on the institutional website.

Students who have concerns about approval or a grade impact may utilize the student concern procedure for concerns not directly related to grades, or to the grade appeal process in cases impacting a final grade.

## PROCEDURE

1. Students must coordinate an absence with the Office of the Vice President for Instruction. Such absences must be requested in writing within the first two weeks of the quarter and may not incur additional fees for students. In the event that the absence would occur within the first two weeks of the quarter, the student must provide a minimum of 14 days advance written notice for on-campus activities (i.e. classroom, lab) or provide advance written notice prior to the last day of the preceding quarter for off-campus activities (i.e. Clinical rotations) occurring in the next quarter. If the necessity for the absence was not known until later, the student will submit the request within one day of becoming aware.
2. All requests for authorized absences under this policy must be in writing and contain a concise explanation of how the requested holiday is related to a reason of faith or conscience or to an organized activity conducted under the auspices of a religious denomination, church, or religious organization.
3. All absences under this policy must be approved by the Vice President for Instruction in advance of the absence. The college will not authorize an absence for a student after the absence occurs unless there are compelling circumstances to do so.
4. The Office of the Vice President for Instruction will provide the student with a document verifying the date of the approved absence and further instructions. In order to ensure that their absence does not negatively impact their grades, the student must comply with directions for notifying their instructors of their upcoming authorized absence. The student is solely responsible for ensuring the documentation authorizing the absence is provided to each of the instructors whose classes or assignments are related to the absence.
5. After an instructor is notified by the student of an

upcoming absence, the instructor will determine what adjustments, if any, will need to be made to the student's scheduled classwork or assignments. The instructor shall inform the student of these adjustments within two days of receiving notification of the student's absence.

6. If the student's desired absence date is on a day when a test is scheduled or an assignment is due, the instructor may require that the student take the test or submit the assignment before the regularly assigned date.
7. Regardless of an instructor's class expectations or grading policies, absences authorized under this policy shall not adversely impact a student's grade.
8. If a student fails to notify any of their instructors of an authorized absence under this policy (as approved by the Vice President for Instruction), the instructor is not obligated to make any accommodations for the student's absence or treat the absence as being authorized under this policy or the law.

## Grades

The quality of a student's performance is measured by a grading system using grades "A" through "F." The grade for a course is calculated into a student's GPA as 4 to 0 grade points. With the exception of A+ and D-, faculty may opt to use either "+" or "-" designations with grades.

Each individual program establishes criteria for achieving each grade based on percentage scores and specific assessment criteria as listed in the course syllabi.

The grade points allotted to each grade are as follows:

<b>A</b>	<b>4.0</b>	<b>C</b>	<b>2.0</b>
<b>A-</b>	<b>3.7</b>	<b>C-</b>	<b>1.7</b>
<b>B+</b>	<b>3.3</b>	<b>D+</b>	<b>1.3</b>
<b>B</b>	<b>3.0</b>	<b>D</b>	<b>1.0</b>
<b>B-</b>	<b>2.7</b>	<b>F</b>	<b>0.0</b>
<b>C+</b>	<b>2.3</b>		

Some programs require that the student complete each individual course at a certain minimum grade level in order to progress in the program. Programs with this requirement will have it noted in the program description section of the catalog and in the course syllabus. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

## Other Grade Indicators

- \* Course not graded. No grade point assigned.
- I Incomplete. An incomplete grade indicates that the student completed most of the course requirements at a passing level and intends to complete missing course work. Prior to the last day of the quarter, the instructor must complete a Clover Park Technical College Agreement for Incomplete Grades form indicating the work to be completed and the expected completion date, not to exceed one academic quarter from the date of issue. The form must be signed by both the instructor and the student. A grade of “I” reverts to an “F” if work has not been satisfactorily completed by the end of the following quarter.
- N Audit Course. No grade point assigned.
- P Pass. No grade point assigned. A “P” grade indicates passing with a “C” (2.0) in courses designated as pass/fail. Courses graded with “P” may not meet program requirements for graduation.
- R Repeated Courses. The “R” will be placed next to the lowest grade, and only the highest grade received for the course will be used in GPA calculation.
- V Unofficial Withdrawal. No grade point assigned. Instructor-initiated, a “V” appears on the transcript when an instructor withdraws a student who has never attended (No Show) or has discontinued participation without initiating official withdrawal.
- W Official Withdrawal. No grade point assigned. Student-initiated, a “W” appears on the transcript when a student officially withdraws from a course in accordance with the college Drop/Withdrawal procedure.

## Course Numbering

Courses numbered below 100 are not considered college level and do not meet degree/certification requirements.

## Criterion for Good Standing

A student is in good academic standing when his or her quarterly grade point average remains at or above 2.0. Financial aid recipients are subject to the Student Progress Policy as stated in the Financial Aid section of this catalog.

## Grade Changes

Students who believe that an error has been made in the grade received for a course should contact the instructor as soon as possible to discuss the issue. Requests for grade changes will be accepted no later than one quarter from the

date the grade was issued. Appeals will be addressed through the Academic Appeal Process described in this catalog.

## Adding a Course

Students may add courses online through the second day of the quarter without faculty permission. After that date, faculty permission is required. Add/Drop forms are available in the Enrollment Services Office.

## Withdrawing from a Course

Students dropping or withdrawing from any course or program must meet with their program adviser and complete the withdrawal paperwork. If an emergency occurs preventing the student from coming to the college, the student may contact their program adviser through email or telephone. Failure by the student to officially withdraw will affect grades and possible refunds. Financial Aid recipients are subject to the Satisfactory Academic Progress Policy and should contact the Student Aid & Scholarships Office prior to withdrawing from a program or course.

Withdrawals through the fifth class day after the start of a course or program will be considered a drop and will not appear on the student transcript. Students receiving aid will be subject to the 10th day overpayment policy.

Withdrawals after the fifth class day and through the 35th class day of a quarter may receive a “W” grade. Students withdrawing after the end of the 35th class day of a quarter will receive the grade earned for the quarter at the time of withdrawal.

Students re-enrolling in a course or program for which a “W,” “F,” or “V” was assigned must begin the course or program in the first week of the quarter and in accordance with established prerequisites.

## Administrative Withdrawal

Clover Park Technical College reserves the right to administratively withdraw students under the following conditions:

1. Student has not attended the first two class sessions or misses the first two class assignments in an asynchronous class, and/ or not complied with the established attendance policy for the class or program.
2. Student has not successfully fulfilled the prerequisites

for the class or program. Student will be notified of the withdrawal and provided registration options.

3. If a student violates the Student Code of Conduct. Student will be notified of this action.

## Auditing a Course

A student may enroll to audit a course with permission of the program faculty. The auditing student is expected to pay tuition and fees but is not required to take examinations and will not receive credit for the course. A grade of “N” will be listed on the student’s transcript and will not be computed in their GPA.

Registration status changes from audit to credit or from credit to audit are not allowed after the start of the course.

## Repeating a Course

Students may repeat a course in which they have not received a passing grade, unless prohibited by program policy. To repeat a course, a student must register for the course and pay all necessary fees.

A course may be repeated no more than twice (this is defined as two repeats in addition to the original enrollment). All courses and earned grades will remain on the student’s transcript, with only the highest grade received for a repeated course used in the calculation of the GPA.

Financial aid recipients and veterans should check with the Student Aid & Scholarships and the Veteran’s Business Offices regarding funding for repeated courses.

Other colleges may not accept a grade earned in a repeated course.

## General Education

Consistent with its mission, Clover Park Technical College establishes and assesses, across all associate and bachelor level programs or within a general education curriculum, institutional learning outcomes and/or core competencies. Examples of such learning outcomes and competencies include, but are not limited to, effective communication skills, global awareness, cultural sensitivity, scientific and quantitative reasoning, critical analysis and logical thinking, problem solving and/or information literacy.

Students are responsible for registering and completing these courses prior to graduation. Specific courses are

identified in the program descriptions. General Education courses are offered at convenient hours throughout the day each quarter.

Students must earn a grade of “C” (2.0) in all pre-college course work in order to advance to the next level course or any 100-level course.

## Core Abilities

Clover Park Technical College has identified four core abilities that all certificate- and degree-seeking students should possess upon completion of their program. These competencies represent workplace skills that will prepare graduates to be valued employees and will contribute to their success.

### Communication

Students will receive and deliver written, spoken, and visual information clearly and accurately.

### Critical Thinking/Problem Solving

Students will apply principles and strategies of purposeful, active, organized thinking.

### Personal/Professional Responsibility

Students will apply effective work habits and attitudes within an organizational setting and work successfully with others as part of the total team, both inside and outside the workplace.

### Information/Technological Literacy

Students will use modern electronic and industrial devices to accomplish tasks in today’s workplace.

## College Success Course

A course entitled “College 102 – College Success for All” is required for all students entering a certificate or degree program over 20 credits in length. The course should be completed during the first quarter of study at CPTC. Transfer credit may be awarded if applicable.

## Additional Degree Requirements

**To receive an Associate of Applied Technology degree (AAT), an Associate in Applied Science – T (AAS-T) degree, or an Associate of Arts and Science Degree Direct Transfer Agreement/Major Related Program (DTA/MRP) at Clover Park Technical College, the following degree requirements must be met:**

- Successful completion of the technical and General Education courses required for your program.
- Completion of a capstone project course. Courses that satisfy the degree requirement for a capstone project are identified in the catalog with a CAP postscript following the course number.
- Completion of a diversity requirement. Courses that satisfy the diversity degree requirement are identified in the catalog with a DIV postscript following the course number.
- Completion of a computer literacy requirement. Computer literacy may be demonstrated by either passing a competency test or successfully completing a computer literacy course designated with a CL postscript following the course number.

**To receive a Bachelor of Applied Science degree, the following degree requirements must be met:**

- Successful completion of an earned Applied Associate degree, AAS-T, Direct Transfer Associate degree, or a bachelors degree or higher from a regionally accredited college or university with an overall minimum college-level grade point average of 2.3 in all coursework.
- Completion of required lower and upper division general education courses.
- A minimum of 180 quarter credits, to include 90 credits from one of the degrees listed above.

**Previous Baccalaureate Degree earned**

Students who have earned a baccalaureate degree from an institution accredited by one of the following agencies:

- Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC)
- Higher Learning Commission (HLC)
- Middle States Commission on Secondary Schools (MSA-CESS)
- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)

- Middle States Commission on Higher Education (MSCHE)
- New England Commission of Higher Education (NECHE)
- WASC Senior College and University Commission (WSCUC)

will have met the general education requirements (basic and distribution areas) for a baccalaureate degree from a Washington State community or technical college. Students must still complete program-specific general education degree requirements if not otherwise satisfied.

Nothing in this policy is intended to restrict the institutional prerogative to evaluate and award additional credit through its existing policies and practices

## Transfer of Credit to Clover Park Technical College

Programs may have exceptions to the maximum credits accepted in transfer due to special articulations or consortium agreements. These exceptions will be noted in the program description section of this catalog.

### Credit from Colleges and Universities

Clover Park Technical College curriculum is based on current industry standards. Transfer credit from an accredited institution may be accepted if the course work:

1. Was college level.
2. Was graded as “D” (1.0) or better. NOTE: Some CPTC programs may require a C (2.0) or higher.
3. Technical Courses must meet the program’s requirements as described in the Clover Park Technical College Catalog.
4. General Education Courses do not have a required time limitation, unless specified by an individual program. Requirements can be found in the program description of this catalog.
5. Transfer credit combined with all sources may constitute no more than 75 percent of the credits needed for program completion.
6. Transfer of credit for programs with license requirements are subject to current licensing laws.

## **Military Experience**

Credit may be accepted for military experience or education based on the Joint Services Transcript (JST) and guidelines from the American Council on Education. Please request an evaluation of your JST from the Enrollment Services Office located in Bldg. 17, Rm. 130, at the Lakewood Campus.

## **Academic Credit for Prior Learning (Formerly Known As Prior Learning Assessment [PLA] Credit or Prior Experiential Learning)**

Four categories for academic credit for prior learning have been established: Prior Experiential Learning (Portfolio Review), Credit by Examination, Extra-Institutional Learning, and Course Challenge. All options are explained below.

### **Prior Experiential Learning (Portfolio Review)**

Instructors will evaluate the prior learning portfolio of a student in relation to the competencies of the program and may award credit for demonstrated learning outcomes appropriate to the subject, course, or program offered.

Students who wish to receive credit for prior learning will complete the Online Request Form available at [www.cptc.edu/esforms](http://www.cptc.edu/esforms) (p. 294) and pay the following fees at the cashier's office for assessment services: \$50 evaluation fee and \$20 transcription fee for each course for which prior learning credit is requested.

### **Credit by Examination/CLEP and DSST Credit**

The College-Level Examination Program (CLEP) is a way to earn credit for comprehensive knowledge you may have acquired through independent or prior study, cultural pursuits, work, or other life experiences. If you successfully pass the CLEP tests, you may receive credit for completing certain certificate or degree requirements.

Clover Park Technical College (CPTC) accepts the following subject tests when passed with the recommended American Council on Education (ACE) score: College Mathematics, College Algebra, Introductory Psychology, and English Composition. Information about CLEP tests and testing sites can be obtained on the College Board website at [www.collegeboard.com](http://www.collegeboard.com).

DSST (formerly known as DANTES Subject Standardized Tests) is also accepted as a way to earn credit for prior knowledge or experience. The subject must be equivalent to CPTC courses and will be accepted according to the ACE recommendations for passing and credit value.

Information about DSST tests and testing sites can be obtained online at [www.dantes.doded.mil](http://www.dantes.doded.mil).

## **Credit by Extra-Institutional Learning**

Knowledge and skills acquired outside the institution and objectively verified through third-party certifications, industry-recognized testing/training, and crosswalks. Students who wish to receive credit for prior learning will complete the Online Request Form available at [www.cptc.edu/esforms](http://www.cptc.edu/esforms) (p. 294) and pay the following fees at the cashier's office for assessment services: \$50 evaluation fee and \$20 transcription fee for each course for which prior learning credit is requested.

## **Credit by Course Challenge**

Challenge examinations are sufficiently comprehensive to determine that the student has the same knowledge and skills as those students who enroll in, and successfully complete, the course. A student should have previous training, private study, work experience, or other bona fide qualifications indicating the student has knowledge or abilities equivalent to course completers. Students who wish to receive credit for prior learning will complete the Online Request Form available at [www.cptc.edu/esforms](http://www.cptc.edu/esforms) (p. 294) and pay the following fees at the cashier's office for assessment services: \$50 evaluation fee and \$20 transcription fee for each course for which prior learning credit is requested. Should the course challenge be unsuccessful, the student will be required to take the course.

## **Alternative Credit Options**

CPTC accepts many alternative credit options for completion of degrees and certificates; however, if your plans include transfer to another college or university, they may not provide the same credit, and you should check with their admissions office to determine your best options for meeting your educational goals.

## **Second Baccalaureate Degree General Education Requirements**

Students who have earned a baccalaureate degree from an institution accredited by one of the following agencies:

- Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (ACCJC)
- Higher Learning Commission (HLC)



- Middle States Commission on Secondary Schools (MSA-CESS)
- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
- Middle States Commission on Higher Education (MSCHE)
- New England Commission of Higher Education (NECHE)
- WASC Senior College and University Commission (WSCUC)

will have met the general education requirements (basic and distribution areas) for a baccalaureate degree from a Washington State community or technical college. Students must still complete program-specific general education degree requirements if not otherwise satisfied.

Nothing in this policy is intended to restrict the institutional prerogative to evaluate and award additional credit through its existing policies and practices.

## Transferability of Clover Park Technical College Credit

Many Clover Park Technical College programs have individual agreements with other academic institutions that provide for the transfer of credits. Acceptance of credit taken at one educational institution is always at the discretion of the receiving institution. Students are advised to contact the registrar of the receiving institution to discuss its policies and procedures for transfer credit.

## Transfer Rights and Responsibilities

### Student Rights and Responsibilities

1. Students have the right to clear, accurate, and current information about their transfer admission requirements, transfer admission deadlines, degree requirements, and transfer policies that include course equivalencies.
2. Transfer and freshman-entry students have the right to expect comparable standards for regular admission to programs and comparable program requirements.
3. Students have the right to seek clarification regarding their transfer evaluation and may request the

reconsideration of any aspect of that evaluation. In response, the college will follow established practices and processes for reviewing its transfer credit decisions.

4. Students who encounter other transfer difficulties have the right to seek resolution. Each institution will have a defined process for resolution that is published and readily available to students.
5. Students have the responsibility to complete all materials required for admission and to submit the application on or before the published deadlines.
6. Students have the responsibility to plan their courses of study by referring to the specific published degree requirements of the college or academic program in which they intend to earn a bachelor's degree.
7. When a student changes a major or degree program, the student assumes full responsibility for meeting the new requirements.
8. Students who complete the general education requirements at any public four-year institution will have met the lower division general education requirements of the institution to which they transfer.

### College and University Rights and Responsibilities

1. Colleges and universities have the right and authority to determine program requirements and course offerings in accordance with their institutional missions.
2. Colleges and universities have the responsibility to communicate and publish their requirements and course offerings to students and the public, including information about student transfer rights and responsibilities.
3. Colleges and universities have the responsibility to communicate their admission and transfer-related decisions to students in writing (electronic or paper).

## Clover Park Technical College Degrees

### Bachelor Degrees

**Bachelor** degrees are awarded for completion of at least 90 credits of appropriate coursework. An applied associate degree (AAT, AAS-T or equivalent) or 90 credits of college-level course work or Academic Credit for Prior Learning (ACPL) are the prerequisites for program admission. Other program admission requirements can be

found online.

### **Associate of Applied Technology (AAT)**

**The Associate of Applied Technology (AAT) degree** is awarded to students who satisfactorily complete the competencies and requirements in programs approved by the college's Curriculum Committee and by the State Board for Community and Technical Colleges. AAT degree options are available in programs 90 credits or more in length.

### **Associate in Applied Science – Transfer (AAS-T)**

**The Associate in Applied Science - Transfer (AAS-T) degree** is awarded to students who satisfactorily complete the competencies and requirements in programs approved by the college's Curriculum Committee and by the State Board for Community and Technical Colleges. AAS-T degrees are workforce degrees with a core of General Education courses commonly accepted in transfer. The General Education component of the AAS-T degree is composed of not less than 20 credits of courses, including a minimum of 5 credits in communication; 5 credits in quantitative reasoning; and 10 credits in social science, humanities, or science. It is assumed that many AAS-T degrees will have significantly more than the minimum 20 credits of General Education courses.

### **Associate of Arts and Sciences (Direct Transfer Agreement/Major Related Program)**

**The Associate in Pre-Nursing (DTA/MRP)** is the degree awarded by Clover Park Technical College to students who have completed specified curriculum with the intent of transferring to one of Washington's four-year institutions. Direct Transfer Agreement/Major Related Program (DTA/MRP) degrees prepare students with general education requirements necessary to pursue further study. They do not alter the admission criteria established by the baccalaureate institution, nor do they guarantee admission to the institution. Students should contact an adviser at the potential transfer institution regarding their interests and specific course choices.

Degree options are indicated on individual program descriptions in this catalog.

## **Clover Park Technical College Transfer Agreements**

In general, Clover Park Technical College's Associate of Applied Technology (AAT) degrees are not designed with the intent for transfer to other colleges or universities.

However, Clover Park Technical College has established transfer agreements with specific baccalaureate programs. Graduates of our Associate in Applied Science – T (AAS-T) degrees and the Associate in Pre-Nursing (DTA/MRP) program may find opportunities to further their education at these institutions. Students desiring to transfer to a bachelor's program are encouraged to contact the desired colleges and universities early in their studies to ensure the best possibility of transfer upon completion of an AAS-T or DTA/MRP.

### **Ashford University**

Ashford University (AU) offers 50-plus degree programs (undergraduate and graduate) both on-site and online. Students can keep in touch with professors and classmates "on-the-go" with the Ashford mobile app. CPTC students earning an approved associate degree may qualify for a "block" of credits to transfer to Ashford University. Ashford is regionally accredited by the Western Association of Schools and Colleges (WASC). Contact AU at [www.ashford.edu](http://www.ashford.edu) to learn more about transfer opportunities and requirements.

### **Bellevue College**

Bellevue College (BC) is an open-access, community-based public institution. BC offers a pathway for qualifying Clover Park Interior Design graduates (AAS-T) to pursue a Bachelor of Applied Arts in Interior Design (BAA). Bellevue College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact BC at [www.bellevuecollege.edu](http://www.bellevuecollege.edu) for details about transfer.

### **Boston Architectural College**

The Boston Architectural College (BAC) Bachelor and Master of Architecture programs, accredited by the National Architectural Accrediting Board, prepare students to become successful licensed architects through real-world practical experience, professional networks, and creative scholarly opportunities. The BAC's Bachelor of Science in Architecture is a pre-professional program that can lead to our 2-Year Master of Architecture program. An articulation agreement with BAC allows graduates of CPTC's Interior Design degree program to transfer into the Bachelor of Interior Architecture at the Boston Architectural College (BAC) upon meeting all requirements. Contact BAC at <https://www.the-bac.edu/academics/school-of-architecture> to learn more about transfer opportunities and requirements.

### **Brandman University**

Brandman University (BU) is a private, non-profit, accredited university in the Chapman University System that serves the unique needs of the working adult. Current CPTC students may apply for entrance to Brandman's Early Advantage Program (EAP), which is designed to maximize transfer success and minimize the time and costs involved in attaining a bachelor's degree in various disciplines. EAP students receive comprehensive advising and planning services and will be able to precisely map their transfer plan to BU while continuing to take transferrable coursework at CPTC. They may also qualify for a one-time scholarship. BU is accredited by the Western Association of Schools and Colleges (WASC). Contact BU at [www.brandman.edu](http://www.brandman.edu) for more information about the Early Advantage Program.

### **Capella University**

Capella University (CU) is an accredited online university that combines foundational theory with real-world application to ensure students receive a high-quality education. If CPTC graduates of approved programs (including Computer Information Technology, Human Services, and Nursing) meet Capella's admissions requirements, they may apply for specific upper-division bachelor's degree programs at CU. Self-identifying students may be eligible to receive a tuition discount. CU offers additional benefits to U.S. Armed Forces learners. Capella University is accredited by the Higher Learning Commission (North Central Association). Contact [www.capella.edu](http://www.capella.edu) for details and admission requirements.

### **Central Washington University**

Central Washington University (CWU) provides a pathway to a baccalaureate degree for Clover Park students. Your applied associate degree provides you the skills to work in your chosen field. The Bachelor of Applied Science (BAS) degree in Information Technology and Administrative Management (ITAM) at CWU complements that degree with the management/leadership skills to help you become a leader in your knowledge area. Students with degrees in Accounting, Aviation Maintenance, Human Services, and Medical Laboratory Technology (to name a few) will benefit from a university degree that gives them the skills to manage people and projects. Many more career opportunities will be available with the BAS-ITAM degree. CWU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For information about CWU, visit the website at [www.cwu.edu](http://www.cwu.edu). For specific information about the BAS-ITAM program, please visit [www.cwu.edu/it-management/bas-overview](http://www.cwu.edu/it-management/bas-overview).

### **Chamberlain College of Nursing**

As part of the DeVry Education Group, Chamberlain College of Nursing is committed to graduating compassionate, ethical, and knowledgeable nurse leaders who are empowered to transform healthcare. CPTC graduates earning an associate degree in nursing who are accepted into Chamberlain's Bachelor of Science in Nursing or Master of Science in Nursing may qualify to receive reduced tuition rates. Chamberlain is accredited by The Higher Learning Commission and is a member of the North Central Association of Colleges and Schools (NCACS). For more information on transfer requirements, contact Chamberlain at [www.chamberlain.edu](http://www.chamberlain.edu).

### **City University of Seattle**

City University of Seattle (CityU) is a private nonprofit university regionally accredited through the doctorate level. It is dedicated to serving working adults and transfer students looking to start, change, or grow their career. CityU welcomes students from Clover Park Technical College and invites them to explore CityU's 60-plus degree and certificate programs offered online and on-site. U.S. News & World Report has ranked City University of Seattle as having one of the top 30 Best Online Bachelor Degree Programs in the U.S. and as being one of the top 20 online programs for veterans in the country. CityU is proud to be a top-ranked institution in the country and a top producer of teachers, counselors, and MBAs in Washington State. They offer a transfer scholarship of \$5,680 to Washington students. City University of Seattle is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Explore your opportunities at [www.cityu.edu](http://www.cityu.edu) or stop by CityU's Tacoma campus at 1145 Broadway Plaza, Tacoma, WA, 98402.

### **Colorado Technical University**

With a strong focus on technology and curriculum, Colorado Technical University (CTU) enables students to move upward while providing support from an experienced network of faculty and alumni. CPTC graduates completing a transfer program with a GPA of 2.0 or greater and meeting admission requirements will have the opportunity of admission into a baccalaureate degree program through CTU's Virtual Campus. CTU is accredited by the Higher Learning Commission and is a member of the North Central Association of Schools and Colleges. For full details, contact Colorado Technical University at [www.coloradotech.edu](http://www.coloradotech.edu).

## Eastern Washington University

Eastern Washington University (EWU) is a regional, comprehensive public university located in Cheney, Washington, with programs also offered at various locations across the state. EWU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact EWU at [www.equ.edu](http://www.equ.edu) for more information about transfer.

## Embry-Riddle Aeronautical University

Embry-Riddle Aeronautical University (ERAU) is the world's preeminent university for aviation and aerospace education offering associate through doctorate-level degrees. Transfer eligibility is determined upon transcript evaluation by ERAU (with over 100 CPTC courses on the Common Course/Equivalency List) and is based on the current catalog at the time of transfer. ERAU is accredited by the Southern Association of Colleges and Schools Commission on Colleges. To learn more about Embry-Riddle, go to [www.erau.edu](http://www.erau.edu).

## The Evergreen State College

The Evergreen State College (TESC) is a progressive, public liberal arts and sciences college located in Olympia, Washington. TESC reviews eligible transfer candidates (19 programs) for admission into either a Direct Transfer Degree (7 CPTC degrees) or the Upside Down Degree Program (from list of approved AAS-T degrees). The "Upside Down" degree allows CPTC graduates from approved technical degree programs to earn a bachelor's degree from TESC by taking a broad array of general education coursework in their final two years. The Evergreen State College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). To learn more about eligible direct transfer programs and Upside Down degree opportunities, contact TESC at [www.evergreen.edu](http://www.evergreen.edu).

## Excelsior College

Excelsior College is a not-for-profit institution of higher education that provides educational opportunity to adult learners with an emphasis on those historically underrepresented in higher education whether wanting to finish a degree, earn a promotion at work, or change careers. Excelsior is chartered by the New York State Board of Regents and accredited by the Middle States Commission on Higher Education (CHE/MSA). Under an "umbrella" agreement, CPTC graduates meeting eligibility requirements will be considered for transfer. Contact Excelsior at [www.excelsior.edu](http://www.excelsior.edu) to obtain a transfer guide

and more information about transfer opportunities.

## Fashion Institute of Design and Merchandising

The Fashion Institute of Design and Merchandising (FIDM) educates students for professional careers in Fashion, Entertainment, and Digital Media. Transfer opportunities are available for approved Interior Design and General Studies courses toward FIDM core requirements. Additional courses may be considered on a case-by-case basis. FIDM is accredited by the Western Association of Schools and Colleges (WASC) and the National Association of Schools of Art and Design (NASAD). To learn more, contact the Fashion Institute at [www.fidm.edu](http://www.fidm.edu).

## Green River College

Green River College is a public college where students from all over the world come together to learn, grow, and enrich their lives. Green River's main campus is located in the Lea Hill neighborhood of Auburn, with branch campuses in downtown Auburn, Kent, and Enumclaw. Transfer opportunities are available for CPTC graduates completing specific Computer Networking & Information Systems Security (CNISS) degrees to transfer to Green River's Bachelor in Applied Science in Network Administration and Security or Bachelor in Applied Science in Software Development. Go to [www.greenriver.edu](http://www.greenriver.edu) to learn more about these transfer opportunities.

## Northwest University

Northwest University (NWU) is a Christian coeducational institution awarding degrees through doctorate level. NWU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* Northwest is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact NWU at [www.northwestu.edu](http://www.northwestu.edu) to find out more about BSN transfer.

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

## Pacific Lutheran University

Pacific Lutheran University (PLU), located in Tacoma,

Washington, seeks to educate students for lives of thoughtful inquiry, service, leadership, and care for other people, for their communities, and for the earth. PLU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* Pacific Lutheran University is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For additional information about transfer, contact PLU at [www.plu.edu](http://www.plu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **Saint Martin's University**

Saint Martin's University (SMU) is a Catholic Benedictine institution of higher education located in Lacey, Washington. The transfer agreement with SMU has the goal of increasing the number of nurses with a baccalaureate education in nursing to meet the needs of an increasingly complex health care system. SMU offers qualified students graduating from CPTC's Nursing degree programs and passing the NCLEX-RN exam the opportunity to seamlessly transition into their Bachelor of Science in Nursing (RN-to-BSN) program (dual admission). SMU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact SMU to find out which programs transfer and for specific requirements at [www.stmartin.edu](http://www.stmartin.edu).

### **Seattle Pacific University**

Seattle Pacific University (SPU) is a Christian university fully committed to engaging the culture and changing the world by graduating people of competence and character, becoming people of wisdom, and modeling grace-filled community. SPU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* SPU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). For additional information about transfer, contact SPU at [www.spu.edu](http://www.spu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not,

however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **Seattle University**

Seattle University (SU), a Jesuit Catholic university and law school located in Seattle's Capitol Hill neighborhood, is dedicated to educating the whole person, to professional formation, and to empowering leaders for a just and humane world. SU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* SU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Those interested in transferring to pursue a baccalaureate degree in Nursing should contact SU at [www.seattleu.edu](http://www.seattleu.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **South Seattle College**

South Seattle College (SSC) is a constantly evolving educational community dedicated to providing quality learning experiences that prepare students to meet their goals for life and work. SSC offers transfer opportunities for qualified Accounting and Culinary Arts graduates (AAS-T) to pursue a Bachelor of Applied Science (BAS) in Hospitality Management. SSC is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact SSC at [www.southseattle.edu](http://www.southseattle.edu) to find out more about transfer.

### **University of Phoenix**

University of Phoenix (UP) offers online courses, as well as classes at more than 100 locations across the United States. UP will provide transcript evaluation for CPTC students interested in pursuing a Bachelor of Science in Management (BSM) degree. Qualifying students nearing completion (within 12 months of receiving degree) may pre-apply to a UP baccalaureate program. To find out more about the University of Phoenix, including accreditation and transfer opportunities, and to obtain a program transfer guide, go to [www.phoenix.edu](http://www.phoenix.edu).

### **University of Washington (Seattle)**

Founded in November 1861, the University of Washington (UW) is one of the oldest state-supported institutions of higher education on the Pacific coast with three campuses. The primary mission of the University of Washington is the preservation, advancement, and dissemination of knowledge. UW is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* UW is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact UW for more information about BSN transfer at [www.washington.edu](http://www.washington.edu).

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **University of Washington Tacoma**

University of Washington Tacoma (UWT) serves a diverse student population creating a rich learning environment with many points of view where students will feel at home whether full-time or pursuing a degree while juggling other responsibilities. CPTC graduates of the Environmental Sciences and Technology (AAS-T) program meeting transfer requirements will have the opportunity to apply to UWT's Bachelor of Arts in Interdisciplinary Arts and Sciences Environmental Studies Concentration degree program. UWT is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact UWT for more information at [www.tacoma.uw.edu](http://www.tacoma.uw.edu).

### **Walla Walla University**

Founded in 1892, Walla Walla University (WWU) is a private university affiliated with the Seventh-day Adventist Church that welcomes any student who desires an exceptional Christian education. WWU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* Walla Walla is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Contact WWU at [www.wallawalla.edu](http://www.wallawalla.edu) to find out more about BSN transfer.

\* The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

### **Washington State University**

Washington State University (WSU) opened its doors in 1892 and is a nationally recognized research university enrolling more than 25,000 students worldwide. WSU is a participant in a direct transfer agreement through the Washington State Board for Community and Technical Colleges (SBCTC) that allows graduates of CPTC's Associate in Pre-Nursing (DTA/ MRP) degree to apply to Bachelor of Science in Nursing (BSN) programs at participating institutions.\* The Washington State University Intercollegiate College of Nursing (WSU-ICN), a consortium whose members include Eastern Washington University, Gonzaga University, and Whitworth University, admits associate degree transfers through WSU. WSU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact WSU for more information about BSN transfer at [www.wsu.edu](http://www.wsu.edu).

\*The DTA/MRP degree pathway streamlines preparation for the basic BSN pathway across the state. It does not, however, guarantee acceptance into a BSN program. Due to high interest and limited space in BSN programs, admission to all BSN programs is highly competitive.

CPTC graduates of the Architectural Engineering Design (AAS-T) program meeting transfer requirements will have the opportunity to apply to WSU's Bachelor of Science in Architectural Studies degree. The transfer of credit allowed under a customized articulation is structured to maximize the use of Clover Park credits applicable to the Bachelor of Science in Architectural Studies degree at WSU.

### **WGU Washington**

Western Governors University (WGU) is an online university driven by a mission to expand access to higher education through online competency-based degree programs. WGU has flourished into a national university, serving more than 40,000 students from all 50 states. WGU offers several pathways for transfer. WGU Washington actively encourages students to complete their associate degree before transferring to WGU, understanding that students with associate degrees are more likely to attain a bachelor degree. WGU Washington and the Washington Community and Technical Colleges executed a formal articulation agreement in May 2011 to assist associate

degree graduates to transition into WGU bachelor programs.

WGU Washington also recognizes that some college students will enroll in WGU Washington before completing an associate degree and, during the course of completing their bachelor credentials at WGU, will earn sufficient credits to complete an associate degree. In order to encourage degree completion among Washingtonians, WGU and the Community and Technical Colleges (CTC) have advanced their partnership by offering a reverse articulation agreement, whereby the CTCs will award an earned associate degree for students post-transfer. The agreement enables eligible students who transfer credits from a community or technical college to receive their associate degree (from a CTC) while enrolled at WGU, once they have satisfied the degree requirements of the Community or Technical College. WGU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). To learn more about transferring to WGU Washington, visit [www.wgu.edu/admissions/transferring](http://www.wgu.edu/admissions/transferring).

### **Western Washington University**

Western Washington University (WWU), a public four-year institution in Bellingham, Washington, brings together individuals of diverse backgrounds and perspectives in an inclusive, student-centered university that develops the potential of learners and the well-being of communities. WWU is accredited through the Northwest Commission on Colleges and Universities (NWCCU). Contact WWU at [www.wwu.edu](http://www.wwu.edu) for more information about transfer.

## **Honors**

The CPTC green honor cord is worn during the annual graduation ceremony to recognize students who finish their coursework with the honors designation. The honors designation on a student's final transcript is based on a cumulative GPA 3.75 or higher in all college-level courses for those students earning a degree or a certificate. To determine honor cord eligibility:

- For students completing their program of study in the current spring quarter, the previous winter quarter college-level GPA is used.
- For students who completed their program the previous fall or winter quarters, the final college-level GPA is used.

Students who meet the requirements to wear the green

honor cord will be notified by letter and through their student email account by May 20 of each year. The graduation honors are different than the quarterly president's and vice president's lists.

### **Other Distinctions**

Students who receive a quarterly grade point average (GPA) of 3.75-4.0 are eligible for one of the following lists of distinction:

#### **President's List**

Granted to students with a minimum quarterly enrollment of 12 college-level credits in courses receiving grades other than "V," "W," "N," or "I" and a minimum quarterly grade point average of 4.0.

#### **Vice President's List**

Granted to students with a minimum quarterly enrollment of 12 college-level credits in courses receiving grades other than "V," "W," "N," or "I" and a minimum quarterly grade point average of 3.75-3.99.

### **Academic Honor Societies**

Phi Theta Kappa is the largest honor society in American higher education. Clover Park Technical College's Beta Omicron Gamma chapter is one of 1,200 chapters. Phi Theta Kappa's focus is on scholarship, leadership, service, and fellowship. Students with a 3.50 GPA are eligible to join Phi Theta Kappa. A one-time induction fee is required. Please contact a Phi Theta Kappa adviser at 253-589-5780 for more information.

## **Student Progress Policy**

Clover Park Technical College is a state technical college. Tuition covers about 46 percent of the cost of a student's education. State tax dollars provide the rest. Washington State Law (SB 5135. RCW 28B.10.695) requires all state colleges to adopt policies that ensure students seeking degrees and certificates complete in a timely manner.

Clover Park Technical College is in a partnership with students to work towards an educational plan that will assist them in making consistent progress. The following Student Progress Policy and Degree/Certification Completion Procedures will assist students with their responsibilities to make progress towards their goals.

### **Degree/Certificate Completion Procedures**

The college requires that students complete their degree or

certificate within 125 percent of the published length of the program. The college will take the following steps to ensure that students are completing programs within a timely manner:

**Step 1** When a student has completed the credits of the published length of the program, registration will be restricted until the student has developed a completion plan in consultation with instructional faculty. The plan must show that the student will be able to complete within 125 percent of the normal timeframe. If the student has mitigating circumstances, such as a disability, they must be documented with the Disabilities Specialist, and an appropriate plan should be in place.

**Step 2** At 150 percent of credits required for the degree/certificate, the student will be blocked from further registration. The student may appeal to the appropriate dean for special circumstances.

### Academic Progress

These policies are intended to support a successful learning experience at Clover Park Technical College.

At the conclusion of each quarter, the grades of all students enrolled in that quarter will be reviewed. A student whose quarterly grade point average is less than 2.0 and who is taking six or more credits that quarter will be notified of his/her standing. Through this process the student will be alerted to potential problems in a timely manner, so that the student may take effective corrective action. Any student whose quarterly GPA is under 2.0 will be encouraged to take advantage of the assistance provided by the college to help ensure student success.

The following guidelines have been established to ensure that academic standards are maintained:

**Step 1** The first quarter in which the grade point average is less than 2.0 will cause the student to receive notification of the level of academic achievement. The student may not be allowed to continue to the next course in accordance with established program prerequisites.

**Step 2** If the student experiences two consecutive quarters of work in which the GPA is less than 2.0 (each quarter), the student will be placed on academic probation for the following quarter of attendance.

**Step 3** If a student experiences three consecutive quarters of work in which the GPA is less than 2.0 (each quarter), the student will be suspended from attendance at the college and may not register for the next academic quarter.

Students placed on academic probation or suspension must meet with their program adviser prior to future quarter registration. Financial Aid recipients are subject to the Student Progress Policy.

Reinstatement to the college, following one quarter of academic suspension, requires the student to meet with Advising & Counseling staff to develop an educational plan. Upon reinstatement, the student will resume classes on academic probation.

## Student Concerns

### General Information

It is the policy of Clover Park Technical College to provide students with an opportunity to resolve any alleged violation of college academic policy, procedure or regulation, or to resolve any alleged case of inequitable treatment. The college encourages informal resolution of disputes whenever possible, and also maintains fair and equitable procedures for formally expressing and resolving concerns. Student rights are protected in the concern/appeal process and the college must ensure that a student will not suffer repercussions because they chose to file a concern/appeal in good faith.

This section protects enumerated rights outlined in WAC 495-121-040 guaranteed to each student within the limitations of statutory law and college policy which are deemed necessary to achieve the educational goals of the college:

These academic freedoms include:

1. Students are guaranteed the rights of free inquiry, expression, and assembly upon and within college facilities that are generally open and available to the public.
2. Students are free to pursue appropriate educational objectives from among the college's curricula, programs, and services, subject to the limitations of RCW 28B.50.090 (3)(b).
3. Students shall be protected from academic evaluation which is arbitrary, prejudiced, or capricious, but are responsible for meeting the standards of academic performance established by each of their instructors.
4. Students have the right to a learning environment which is free from unlawful discrimination, inappropriate and disrespectful conduct, and any and all harassment, including sexual harassment.



### Types of concerns excluded from this section

- A student may not use the provisions of this section as the basis for filing a complaint based upon the outcome of disciplinary proceedings described in the Code of Student Conduct.
- Students shall report sexual harassment, sexual assault, or sexual misconduct to the College's Title IX Coordinator.
- Federal and state laws, rules and regulations, in addition to policies, regulations and procedures adopted by the State Board for Community and Technical Colleges (SBCTC) or the Board of Trustees for Clover Park Technical College shall not be grievable matters. Students shall use chapter 495C-300 and 495C-310 WAC for grievances pertaining to sexual discrimination or equal opportunity discrimination based upon disability.
- Employment and personnel decisions. College personnel actions are considered confidential. Results may not be made available for review.
- Quality of instruction is not generally grievable under this process. Students are encouraged to give feedback through the course evaluation process

### Academic Concern Process

The following steps are to be taken in the event a student has an unresolved academic concern, such as a grade appeal, inequitable treatment, or violation of academic policy/procedure and is interested in resolving the issue:

**Step 1** - Before a student can file an official concern or appeal, they should try to resolve the problem informally. The college expects the student to address their concern by first meeting and/or discussing the concern with the college employee(s) whose actions resulted in the concern and documenting the discussion with notes. If not resolved, the student may proceed to the next step:

**Step 2** - If, within 5 instructional days following the informal resolution attempt, the student feels a satisfactory resolution has not been achieved, the student may file a formal concern on-line through the "A Better CPTC" web

portal. The concern will then be routed to the employee's immediate supervisor or designee. The concern or appeal must be in writing, utilizing the appropriate form, and include the documentation from Step 1 as well as any other supporting documentation as an attachment.

**Step 3** - Within 5 instructional days after receiving the concern or appeal in writing, the supervisor (or designee) will be responsible to investigate the concern. The supervisor or designee will provide the employee with a copy of the written concern or appeal; the employee will have 5 instructional days in which to provide a written response to their supervisor.

**Step 4** - The supervisor, or designee, will convene a meeting to hear the complaint and attempt to resolve the issue. It shall be at the discretion of the supervisor to determine whether they will meet with both parties separately or in a joint meeting. In the event that one or both parties do not agree to meet, the supervisor or designee will investigate and render a decision based on the written statements and testimony of the parties. The supervisor or designee will impart this decision in writing to both parties within 5 instructional days. If either party feels a satisfactory resolution has not been achieved, they may proceed to the next step.

**Step 5** - Within 5 instructional days after Step 4, the party appealing the decision in step 4 will notify the Vice-President for Instruction, in writing, to request a hearing before the Appeal Review Committee. The Committee will be chaired by the Vice President for Instruction (or designee) and will also include the Vice President for Student Success (or designee), two student representatives appointed by the Student Council, and two faculty members appointed by the Faculty Union.

**Step 6** - Within 10 instructional days, the Appeal Review Committee will meet with the student, instructor, and director, department chair or supervisor to hear the points at issue in the appeal. The Committee will provide its written decision to all parties within 5 instructional days following the hearing. The decision is final and may not be reviewed.

#### *Important Notes:*

*Academic Appeal must be made within fifteen (15) instructional days following the issuance of the grade or decision.*

*The process above is used for filing a concern in which a*

*resolution has been requested that is specific to the student filing. If a student wishes to file an official complaint that has no personal resolution, or wishes to remain anonymous, that complaint will not follow the above steps.*

### **Non-Instructional Concern Process**

The following steps are to be taken in the event a student has an unresolved non-instructional concern and is interested in resolving the issue:

**Step 1** - The student will meet with the appropriate Department Head to discuss the issue in an attempt to arrive at a resolution. In the event that the student is unable to informally resolve the issue with the Department Head, they may proceed to Step 2,

**Step 2** - If the matter is not resolved at Step 1, the student will complete an online-based concern form through the “A Better CPTC” web portal which will be routed to the appropriate divisional representative who will follow-up with the individual who submitted the concern form within four (4) business days.

**Step 3** - If the matter is not resolved at the meeting with the divisional representative, the student may file a written appeal notice with the appropriate executive-level administrator or designee within (5) business days of the initial decision from Step 2.. The notice must include a brief statement explaining why they are seeking a review.

**Step 4** - The executive-level administrator or designee shall meet with the student within ten (10) days of receiving the written notice and should render a final decision regarding the matter within five (5) business days. This proceeding is considered a final action and is not subject to appeal.

### **Academic Forgiveness (Fresh Start)**

A student may petition the Associate Dean for Student Success to have sub-standard Clover Park Technical College course work set aside.

- The student must be currently enrolled.

- The forgiveness date must be at least two years prior to the current quarter.
- All course work taken prior to the forgiveness will be set aside. The student may not elect to retain individual courses and set aside others.
- The academic forgiveness option may be exercised only once. Forgiven course work will remain on the transcript but will not be used in determining the cumulative grade point average or the calculation of honors. Forgiven course work may not be reinstated or used to satisfy prerequisites or degree/diploma requirements.

Students are advised that a decision to set aside course work may or may not be honored by other educational institutions, since each institution interprets transcripts according to its own policies.

### **Degree and Certificate Completion**

Clover Park Technical College grants five bachelors degrees and three associate degrees: the Associate of Applied Technology degree, the Associate of Applied Science-T degree, and the Associate of Arts and Sciences (DTA/ MRP). These degrees are defined in this catalog, and the degree programs are listed in the Programs & Courses section.

A certificate is awarded to students who satisfactorily complete the competencies and requirements for programs that are not defined as degree programs.

Courses numbered below 100 are not considered college level and do not meet degree/certificate requirements.

#### **Standard for Completion**

To be eligible for completion, a student must have:

1. A cumulative grade point average of no less than 2.0;
2. Met all of the program requirements;
3. Completed 25 percent of the technical coursework at Clover Park Technical College
4. Completed the Application for Degree/Certificate

#### **Application for Degree or Certificate**

To receive a bachelor degree, associate degree, or certificate from Clover Park Technical College, a student must complete an Application for Degree or Certification form available from the Enrollment Services Office or

online at [www.cptc.edu/esforms](http://www.cptc.edu/esforms) (p. 305). The application should be completed by the fourth week of the quarter in which the student expects to complete their degree/certificate.

### **Commencement Ceremony**

Clover Park Technical College will host an annual commencement ceremony to honor any eligible student completing a degree, certificate, high school diploma, or High School Equivalency exam. Students completing their program in the current academic year may participate in the annual ceremony. To find out more about the annual ceremony and to register to attend, please visit: [www.cptc.edu/graduation](http://www.cptc.edu/graduation).

### **Time Limitation**

Clover Park Technical College curriculum is based on current industry standards. Returning Clover Park Technical College students who left prior to completion of their program must meet the program's graduation requirements as described in the current Clover Park Technical College Catalog.

Clover Park Technical College students who have completed the technical requirements of their program but have not completed the General Education requirements for a degree or certificate will have one year from their date of withdrawal to complete the required General Education classes. If a longer period of time elapses before General Education courses are completed, the student will be required to meet the program's graduation requirements as described in the current Clover Park Technical College Catalog.

### **Additional Information**

For additional information please contact the credentials evaluator at [evaluator@cptc.edu](mailto:evaluator@cptc.edu).

## **Campus Policies**

### **Campus Speakers**

1. Student organizations officially recognized by the college may invite speakers to the campus to address their own membership and other interested students and staff, if suitable space is available and there is no interference with the regularly scheduled program of the college. Although properly allowed by the college, the appearance of such speakers on the campus implies neither approval nor disapproval of them or their viewpoints. In the case of speakers who

are candidates for political office, equal opportunities shall be available to opposing candidates if desired by them. Speakers are subject to the normal considerations for law and order and to the specific limitations imposed by the state constitution, which prohibits religious worship, exercise, or instruction on state property.

2. In order to ensure an atmosphere of open exchange and to ensure that the educational objectives of the college are not obscured, the president or designee, in a case attended by strong emotional feeling, may prescribe conditions for the conduct of the meeting, such as requiring a designated member of the staff as moderator, or requiring permission for comments and questions from the floor. Likewise, the president or designee may encourage the appearance of one or more additional speakers at any meeting or at a subsequent meeting, so that other points of view may be expressed. The president or designee may designate representatives to recommend conditions such as time, manner, and place for the conduct of particular meetings.

## **Civil Disturbances**

See Washington State Legislature Revised Code of Washington (RCW) RCW 28B.10.570, RCW 28B.10.571, and RCW18B.10.572.

## **Commercial Activities**

College facilities will not be used for commercial solicitation, advertising, or promotional activities except when such activities clearly serve educational objectives, including but not limited to display of books of interest to the staff or the display or demonstration of technical or research equipment, and when such commercial activities relate to educational objectives and are conducted under the sponsorship or at the request of the college.

## **Distribution of Information**

See Washington Administrative Code (WAC) 495C-141-050 regarding distribution of information.

## **Drug Free Environment**

Clover Park Technical College aims for a Drug-Free Environment. A program has been developed to prevent the illicit use of drugs and the abuse of alcohol by students and employees on college property or as any part of the college's activities. Possession and/or use of illicit drugs

and alcohol is a violation of the Student Code of Conduct and subject to disciplinary action.

## Suspended Operations

<http://cptc.edu/risk/emergency-management>

In the event Clover Park Technical College must close or operate on a delayed schedule due to weather or other emergency conditions, the College will seek to provide such information by no later than 5 a.m.

The information will be shared via multiple methods:

- home page of the College web site, [www.cptc.edu](http://www.cptc.edu).
- [www.FlashAlert.net](http://www.FlashAlert.net), where the information will be shared with news media.
- via CPTCWarn, the college's emergency notification system.
- @CloverParkTech on Facebook and Twitter.

No announcement means normal operation.

Announcements are generally for one day only.

## Non-Discrimination Policy

Clover Park Technical College provides equal opportunity and access in education and employment and does not discriminate on the basis of race; ethnicity; creed; color; sex; gender; gender identity; citizenship status; national origin; age; marital status; religious preference; the presence of any sensory, mental, or physical disability; reliance on public assistance; sexual orientation; veteran status; political opinions or affiliations; or genetic information in any of its programs, activities, and services.

CPTC offers more than 40 career and technical education programs in seven Schools: Aerospace and Aviation; Science, Technology, Engineering, and Design; Automotive and Trades; Advanced Manufacturing; Nursing; Health and Human Development; and Business and Personal Services. CPTC will take steps to ensure that the lack of English language skills will not be a barrier to admission and participation in all educational and vocational education programs.

The Title IX Coordinator has been designated to handle inquiries regarding the non-discrimination policy:

James Neblett

Associate Vice President of Human Resources & Culture

4500 Steilacoom Blvd SW

Lakewood, WA 98499-4004

253-589-5533 | [james.neblett@cptc.edu](mailto:james.neblett@cptc.edu)

## Registered Sexual Offender Policy

The full policy and regulations for enrollment of registered sexual offenders is available in the College Policy and Procedures Handbook found at

<https://www.cptc.edu/policies> (Chapter 5 Section 20 Notification of Registered Sexual Offender(s) Regulation).

When the college is notified by a law enforcement agency that a sexual offender is planning on attending or is attending the college, appropriate notification of the offender's presence will be made to faculty, staff, and students. For details, contact the office of the Vice President for Student Success.

## Safety and Hazardous Materials

The Accident Prevention Plan can be found on the [www.cptc.edu](http://www.cptc.edu) website at <http://cptc.edu/risk/occupational-health-safety>. Accidents should be immediately reported to a college staff member or security at 253-589-5682 and an Accident/Injury Report completed. Some program areas utilize materials which are classified as hazardous chemicals.

The Occupational Safety Health Act (OSHA) Communication Standard 1910.120, and the State of Washington Right to Know Statutes require that chemicals be appropriately labeled and that the college has on file a Safety Data Sheet (SDS) for each of the hazardous chemical products being packaged, handled, or transferred. The SDS provides a description of how the identified chemical is to be handled and is readily available in case of an emergency, or upon request.

Questions or concerns regarding hazardous chemicals should be referred to program faculty for further information.

## Smoking Policy

Smoking or the use of any tobacco product is permitted only in closed private vehicles and designated smoking shelters. Smoking or the use of any tobacco product will not be permitted in any state-owned building or vehicle. This includes e-cigarettes and similar devices.

## Student Right to Know

In compliance with the federal Student Right-to-Know (SR2K) and Campus Security Act of 1990 (Public Law 101-542), Clover Park Technical College makes available information about program completions on the college website, [www.cptc.edu/right-to-know](http://www.cptc.edu/right-to-know). A printed copy of this information may be obtained by calling 253-589-4520.

## Disclaimer and Limitation of Liability

The Clover Park Technical College Catalog provides an overview of the college's courses, programs, services, and policies. We make every effort to convey accurate information; however, the college's classes, programs, and other activities are subject to change at any time without notice. The catalog is not intended to create a contractual obligation.

### Limitation of Liability

The college's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the college for those classes or programs. In no event shall the college be liable for any special, indirect, incidental, or consequential damages, including, but not limited to, loss of earning or profits.

### Publication Disclaimer

Clover Park Technical College has made reasonable efforts to ensure the accuracy of the information throughout this catalog. However, the college reserves the right to make appropriate changes in procedures, policies, calendars, requirements, programs, courses, and fees. When feasible, changes will be announced prior to their effective dates, but the college assumes no responsibility for giving particular notice of any such changes. Changes may apply not only to prospective students, but also to those who are currently enrolled. Nothing contained in this catalog shall be construed to create any offer to contract or any contractual rights. We encourage readers to contact the college or appropriate office to obtain current information.

## Enrollment Services

### Annual Notification of Rights under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their

education records:

1. The right to inspect and review the student's education records within 45 days of the day Clover Park Technical College receives a request for access. Students should submit to the registrar a written request that identifies the record(s) they wish to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, the student will be advised of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. Students may ask Clover Park Technical College to amend a record that they believe is inaccurate or misleading. They should write to the CPTC official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If Clover Park Technical College decides not to amend the record as requested by the student, Clover Park Technical College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by CPTC in an administrative, supervisory, academic, research, or support staff position (including law enforcement personnel and health staff); the federal Department of Defense; the federal Department of Veteran's Affairs; clinical sites; Clinical Placements Northwest; a person or company with whom CPTC has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; a volunteer or others performing institutional functions; a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Clover Park Technical College designates the following information as Directory Information: Student name, major field of study, dates of attendance (quarter start and end dates only), enrollment status (full or part-time), participation in recognized sports, certificates and degrees earned, the term the degree or certificate was awarded and honors.

Directory Information may be released by Clover Park Technical College without student consent, unless the student specifically requests that such information, or portions thereof, not be released. Clover Park Technical College will not release Directory Information for commercial purposes or other purposes not related to the school program or the conduct of official government business. Students currently attending Clover Park Technical College should complete a Request to Prevent Disclosure of Directory Information form in the Enrollment Services Office if they do not wish Directory Information released.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Clover Park Technical College to comply with the requirements of FERPA. The name and address of the office that administers FERPA:

Family Policy Compliance Office  
U.S. Department of Education  
600 Independence Avenue SW  
Washington DC 20202-4605

## Transcripts

A transcript is a copy of a student's academic record and is released only with written permission of the student. All

students are eligible to receive a transcript.

A \$10.00 processing fee is charged for each transcript. Official transcripts may be requested on the Clover Park Technical College website at [www.cptc.edu/transcripts](http://www.cptc.edu/transcripts). Students may obtain an unofficial copy of their transcript at [www.cptc.edu/mycc](http://www.cptc.edu/mycc) (ctcLink) and clicking on the Enrollment Tile >> Transcripts >> Graduation.

## Change of Address

Student information, admission letters, statements, and degrees/certificates are frequently mailed to students; therefore, it is important to maintain the student's current address.

Change of Address forms are available in the Enrollment Services Office in Building 17. Students may change their own address on the college website at [www.cptc.edu/mycc](http://www.cptc.edu/mycc) (ctcLink). Log into ctcLink and access personal information.

## Residency Requirements

Tuition for CPTC is calculated based on your residency status. CPTC follows state-regulated criteria for residency status and the documents needed to verify residency status. Please visit <https://access.wa.gov/topics/living/becomeresident.html> for official information on state residency requirements.

## Student Code of Conduct

### 495C-121-010 - Definitions

The following definitions shall apply for the purposes of this student conduct code, chapter 495C-121 WAC:

1. "College" means Clover Park Technical College, College District Twenty-nine.
2. "College facilities" includes all campuses of the college, wherever located, and all land, buildings, vehicles, equipment, and other real and personal property which are owned, leased, used, or controlled by the college.
3. "Committee" and "student conduct committee" means the committee which is formed under WAC 495C-121-140 and which hears the matters specified in WAC 495C-121-110.
4. "Conduct review officer" is the vice-president of student services or other college administrator

designated by the president to be responsible for receiving and then either reviewing or referring an appeal of student disciplinary action in accordance with WAC 495C-121-110 and following sections of this chapter. The president may reassign any and all of the conduct review officer's responsibilities as set forth in this chapter as he/she deems appropriate.

5. "Day" means a calendar day, except that when a "business day" is specified, business day means a weekday, excluding weekends and college holidays.
6. "Disciplinary action" is the process by which the student conduct officer, or the committee upon a referral, imposes discipline against a student for violation of WAC 495C-121-050. Disciplinary action does not include instructional decisions and actions which are under the authority of faculty members and instructional administrators, such as determinations of academic credit and grading; any such determinations, and any review or appeal of these, are outside the scope of this chapter.
7. "Disciplinary appeal" is the process by which an aggrieved student can appeal discipline, as provided in WAC 495C-121-110 through 495C-121-180.
8. "Family Educational Rights and Privacy Act" and "FERPA" mean the law and regulations known by those names (20 U.S.C. §1232g; 34 C.F.R. Part 99).
9. "Filing" is delivery of a document to the college official who is designated under this chapter to receive it for the purpose of review of a disciplinary action. Unless otherwise provided, filing shall be accomplished by:
  - a. Hand delivery of the document to that official or the official's assistant during regular office hours; or
  - b. Sending the document both by first class mail postage prepaid to the official's office and by e-mail to his/her college e-mail address.
10. "Includes" and "including" means contained as part of a larger described whole or grouping, but these terms are not a limitation and mean "but not limited to."
11. "President" is the president of the college. The president may delegate any of his or her responsibilities under this chapter as he/she deems appropriate.

12. "Respondent" is the student against whom disciplinary action is initiated.
13. "Service" is the delivery of a document or copy of a document to a party. Unless otherwise provided, service upon a party shall be accomplished by:
  14. Hand delivery of the document to the party; or
  15. Sending the document both by first class and/or certified mail postage prepaid to the party's last known address and by e-mail to the e-mail address shown in the college's records. Service is deemed complete either upon hand delivery or when the document has been both deposited in the mail and e-mailed.
16. "Student" includes all persons taking courses at or through the college, whether on a full-time or part-time basis, and whether such courses are credit courses, noncredit courses, online courses, or otherwise. Persons who withdraw after allegedly violating the code, who are not officially enrolled for a particular term but who have a continuing relationship with the college, or who have been notified of their acceptance for admission are considered "students."
17. "Student conduct officer" is a college administrator designated by the president or vice-president of student services to be responsible for investigating allegations of student misconduct and taking disciplinary action as provided in WAC 495C-121-100. The president or vice-president of student services may reassign any of the student conduct officer's responsibilities under this chapter as he/she deems appropriate.
18. "Vice-president of student services" is the position which reports directly to the president and which the president assigns overall operational responsibility for this chapter. The president may reassign, or the vice-president may delegate, any such responsibility as he/she deems appropriate.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-010, filed 5/19/14, effective 6/19/14.]

#### **495C-121-020 - Authority**

The board of trustees, acting pursuant to RCW 28B.10.528 and 28B.50.140(14), delegates to the president the authority to administer student disciplinary actions and

appeals. The president may delegate and/or further assign responsibilities related to student discipline to other college officials and positions.

[Statutory Authority: RCW 28B.50.140., § 495C-121-020, WSR 14-11-070, § 495C-121-020, filed 5/19/14, effective 6/19/14.]

#### **495C-121-030 - Jurisdiction**

1. The student conduct code, chapter 495C-121 WAC, shall apply to student conduct that occurs:
  - a. In or on college facilities;
  - b. At or in connection with college-sponsored activities; or
  - c. Off-campus when in the judgment of the college it adversely affects the college community or the pursuit of its objectives.
2. This chapter applies to conduct which occurs at all locations where students are engaged in college activities, including foreign or domestic travel, activities funded or sponsored by the associated students, athletic or recreational events, training internships, cooperative and distance education, online education, practicums, supervised work experiences, or any other college-sanctioned activities.
3. This chapter applies to conduct from the time of application for admission through the actual receipt of a degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. This chapter shall apply to a student's conduct even if the student withdraws from college while a disciplinary matter is pending.
4. The college has sole discretion, on a case-by-case basis, to determine whether this student conduct code will be applied to conduct that occurs off campus.
5. In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state, or local laws to civil and criminal authorities for disposition. The college may proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil proceedings or criminal prosecution.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-030, filed 5/19/14, effective 6/19/14.]

#### **495C-121-040 - Student rights**

As members of the academic community, students are encouraged to develop the capacity for critical judgment and to engage in an independent search for truth. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the college community.

The following enumerated rights are guaranteed to each student within the limitations of statutory law, rules and college policies:

1. Academic freedom.
  - a. Students are guaranteed the rights of free inquiry, expression, and assembly upon and within college facilities that are generally open and available to the public.
  - b. Students are free to pursue appropriate educational objectives from among the college's curricula, programs, and services, subject to the limitations of RCW 28B.50.090 (3)(b).
  - c. Students shall be protected from academic evaluation which is arbitrary, prejudiced, or capricious, but are responsible for meeting the standards of academic performance established by each of their instructors.
  - d. Students have the right to a learning environment which is free from unlawful discrimination, inappropriate and disrespectful conduct, and any and all harassment, including sexual harassment.
2. Due process.
  - a. The rights of students to be secure in their persons, papers, and effects against unreasonable college searches and seizures are guaranteed.
  - b. No disciplinary sanction may be imposed on any student without notice to the accused of the nature of the charges.
  - c. A student accused of misconduct that is subject to discipline is entitled to the procedural due process set forth in this chapter.



[Statutory Authority: RCW 28B.50.140., § 495C-121-020, WSR 14-11-070, § 495C-121-020, filed 5/19/14, effective 6/19/14.]

#### **495C-121-050 - Prohibited student conduct**

The college may initiate disciplinary action against a student who commits, attempts to commit, or aids, abets, incites, encourages, or assists another person to commit of the following acts of misconduct:

1. Academic dishonesty. Any act of academic dishonesty, including cheating, plagiarism, and fabrication.
  - a. Cheating includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment or requirement.
  - b. Plagiarism includes taking and using as one's own, without proper attribution, the ideas, writings, or work of another person in completing an academic assignment or requirement.
  - c. Fabrication includes falsifying data, information, or citations in completing an academic assignment or requirement, or providing false or deceptive information to an instructor concerning the completion of an assignment or requirement, including submitting for credit without authorization academic work also submitted for credit in another course.
2. Other dishonesty. Any other act of dishonesty, including:
  - a. Forgery, alteration, submission of falsified documents, or misuse of any college document, record, or instrument of identification;
  - b. Tampering with an election conducted by or for college students; or
  - c. Furnishing false information, or failing to furnish correct or complete information, in response to the request or requirement of a college official or employee.
3. Obstruction or disruption. Conduct which significantly obstructs or disrupts any operation of the college, any college meeting, any college class or other activity, any activity authorized to occur at a college facility, or any college-sponsored activity, including obstructing the free flow of pedestrian or vehicular movement or blocking access to or from any college facility or college-sponsored event.
4. Assault, abuse, intimidation, etc. Assault, physical abuse, verbal abuse, threat(s), intimidation, harassment, bullying, stalking, reckless conduct, or other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person or another person's property or which unreasonably disrupts the educational environment. For purposes of this subsection:
  - a. Bullying is severe or pervasive physical or verbal abuse involving an apparent power imbalance between the aggressor and victim.
  - b. Stalking is intentional and repeated following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such an intent.
  - c. Reckless conduct means acts performed with a heightened degree of carelessness or indifference so as to create a significant risk of physical, mental, or emotional harm to another person.
5. Cyber misconduct. Cyberstalking, cyberbullying or online harassment. Use of electronic communications including, electronic mail, instant messaging, texting, electronic bulletin boards, and social media sites, to harass, abuse, bully, or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health, safety, or well-being of another person. Prohibited activities include, unauthorized monitoring of another's electronic communications directly or through spyware, sending threatening messages, disrupting electronic communications, sending a computer virus or malware, sending false messages to third parties using another's identity, nonconsensual recording of sexual activity, or nonconsensual distribution of a recording of sexual activity.
6. Property violation. Damage to, or theft or misuse of, real or personal property or money of:
  - a. The college or state, including college facilities;
  - b. Any college student, official, employee, or organization; or

- c. Any other member of the college community or a college organization. Property violation also includes possession of such property or money after it has been stolen.
7. Failure to comply with directive. Failure to comply with the direction of a college official or employee who is acting in the legitimate performance of his or her duties, including failure to properly identify oneself to such a person when requested to do so.
  8. Weapons. Holding, wearing, transporting, storing, or otherwise possessing any firearm, dagger, sword, knife or other cutting or stabbing instrument, club, explosive device, or any other weapon or device which is apparently capable of producing bodily harm, on or in any college facility, subject to the following exceptions:
    - a. Commissioned law enforcement personnel or legally authorized military personnel while in performance of their duties;
    - b. College-owned knives, tools, etc., that are being used for a legitimate educational purpose as part of a college instructional program;
    - c. A student with a valid concealed pistol license may store a pistol in his or her vehicle parked on campus in accordance with RCW 9.41.050 (2) or (3), provided the vehicle is locked and the pistol is concealed from view; and
    - d. The president may grant permission to bring such a weapon or device on or into a college facility when he/she determines that it is reasonably related to a legitimate pedagogical purpose, provided that such permission shall be in writing and shall be subject to all terms and conditions incorporated in that writing;
  9. Hazing. Any initiation into a student organization, or any pastime or amusement engaged in with respect to such an organization that causes, or is likely to cause, bodily danger, physical harm, or serious mental or emotional harm to any student, regardless of whether the victim has consented.
    - a. Alcohol, drug, and tobacco violations.
    - b. Alcohol. Use, possession, delivery, sale, or being observably under the influence of any alcoholic beverage, except as permitted by law and applicable college policies.
    - c. Marijuana. Use, possession, delivery, sale, or being observably under the influence of marijuana, the psychoactive compounds found in marijuana, or any product containing marijuana or such compounds that is intended for human consumption, regardless of form. While state law permits the recreational use of marijuana, federal law prohibits such use on college facilities or in connection with college activities.
    - d. Drugs. The use, possession, delivery, sale, or being observably under the influence of any legend drug, including anabolic steroids, androgens, or human growth hormones as defined in chapter 69.41 RCW, or any other controlled substance under chapter 69.50 RCW, except as prescribed for a student's use by a licensed health care practitioner.
    - e. Tobacco, electronic cigarettes, and related products. Use of tobacco, electronic cigarettes or smoking devices, and/or related products on or in any college facility is prohibited, except that such use in a designated smoking area or in a closed private vehicle is permitted when consistent with applicable law and rules. "Related products" include cigarettes, pipes, bidi, clove cigarettes, water pipes, hookahs, chewing tobacco, and snuff.
  10. Lewd conduct. Conduct which is lewd or obscene.
  11. Discriminatory conduct. Discriminatory conduct which harms or adversely affects any member of the college community because of her/his race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification.
  12. Sexual misconduct. Any act of sexual misconduct, including sexual harassment, sexual intimidation, and sexual violence.
    - a. Sexual harassment means unwelcome conduct of a sexual nature, including unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature, that is sufficiently serious as to deny or limit, and that does deny or limit, based on sex, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive

- environment for campus community members.
- b. Sexual intimidation. The term "sexual harassment" that involves threatening or emotionally distressing conduct based on sex, including nonconsensual recording of sexual activity or distribution of such a recording.
  - c. Sexual violence incorporates the definition of "sexual harassment" and means a physical sexual act perpetrated without clear, knowing, and voluntary consent, such as committing a sexual act against a person's will, exceeding the scope of consent, or where the person is incapable of giving consent including rape, sexual assault, sexual battery, sexual coercion, sexual exploitation, and gender or sex-based stalking. The term further includes acts of dating violence or domestic violence. A person may be incapable of giving consent by reason of age, threat or intimidation, lack of opportunity to object, disability, drug or alcohol consumption, or other cause.
13. Harassment. Unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit, and that does deny or limit, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for other campus community members. Protected status includes a person's race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age (+40); religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification. See "Sexual misconduct" for the definition of "sexual harassment." Harassing conduct may include, but is not limited to, physical conduct, verbal, written, social media, and electronic.
  14. Retaliation. Taking adverse action against any individual for reporting, providing information, or otherwise participating in a process for addressing alleged violations of federal, state, or local law, or college policies, including allegations of discrimination or harassment.
  15. Misuse of electronic resources. Theft or other misuse of computer time or other electronic information resources of the college, which includes:
    - a. Unauthorized use of such resources or opening of a file, message, or other item;
    - b. Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;
    - c. Unauthorized use or distribution of someone else's password or other identification;
    - d. Use of such time or resources to interfere with someone else's work;
    - e. Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;
    - f. Use of such time or resources to interfere with normal operation of the college's computing system or other electronic information resources;
    - g. Use of such time or resources in violation of applicable copyright or other law;
    - h. Adding to or otherwise altering the infrastructure of the college's electronic information resources without authorization; or
    - i. Failure to comply with the college's policies or procedures governing the use of such time or resources.
  16. Unauthorized access. Unauthorized possession, duplication, or other use of a key, keycard, or other restricted means of access to college property, or unauthorized entry onto or into college property.
  17. Safety violations. Any non-accidental conduct that violates, interferes with, or otherwise compromises any law, rule, policy, procedure, or equipment relating to the safety and security of college facilities or the college community, including tampering with fire safety equipment or triggering false alarms or other emergency response systems.
  18. Motor vehicle operation. Operation of any motor vehicle in an unsafe manner or contrary to posted signs or college procedures.
  19. Violation of laws or policies. Violation of any federal, state, or local law or regulation, or college rule, policy, or procedure, which regulates the behavior of the college's students, including a parking rule.
  20. Student procedures violations. Misuse of or

failure to follow any of the procedures relating to student complaints or misconduct, including:

- a. Falsification or misrepresentation of information;
  - b. Failure to obey a subpoena;
  - c. Disruption or interference with the orderly conduct of a proceeding;
  - d. Destroying or altering potential evidence, or attempting to intimidate or otherwise improperly pressure a witness or potential witness;
  - e. Attempting to influence the impartiality of, or harassing or intimidating, a student conduct committee member or other disciplinary official; or
  - f. Failure to comply with any disciplinary action, term, or condition imposed under this chapter.
21. Ethical violation. Breach of a generally recognized and published code of ethics or standard of professional practice that governs the conduct of a particular profession, which the student has been specifically informed about and is required to adhere to as a condition of enrolling in a course or participating in an educational program.

[Statutory Authority: RCW 28B.50.140., § 495C-121-050, WSR 14-11-070, filed 5/19/14, effective 6/19/14.]

#### **495C-121-060 - Disciplinary sanctions and conditions.**

1. Disciplinary sanctions. The following disciplinary sanctions may be imposed upon students found to have violated the student conduct code:
  - a. Disciplinary warning. An oral statement to a student that there is a violation and that any further violation may be cause for further disciplinary action. Although verbal, the student conduct officer should make a record of the warning. The respondent cannot appeal a disciplinary warning.
  - b. Written disciplinary reprimand. A written notice informing a student that he/she has violated one or more terms of the code of conduct and that future misconduct involving the same or similar behavior may result in the imposition of a more severe disciplinary sanction.

- c. Disciplinary probation. A written notice placing specific term(s) and condition(s) upon the student's continued attendance at the college. Disciplinary probation may be for a limited period of time or for the duration of the student's attendance at the college.
  - d. Disciplinary suspension. Temporary revocation of enrollment and termination of student status, for a stated period of time. The student may be prohibited from coming onto any college facility and may be subject to law enforcement action for criminal trespass for violating that prohibition. There will be no refund of tuition or fees for the quarter in which the action is taken.
  - e. Dismissal. Revocation of enrollment and of all rights and privileges of membership in the college community, and exclusion from college facilities, without any time limitation. There will be no refund of tuition or fees for the quarter in which the action is taken. The student may be subject to law enforcement action for criminal trespass for violating that exclusion. A dismissal may be subsequently ended only by a written decision of the president, for documented good cause.
2. Disciplinary conditions. Disciplinary conditions that may be imposed alone or in conjunction with the imposition of a disciplinary sanction under subsection (1) of this section include:
    - a. Restitution. Reimbursement for (i) damage to, or theft or misuse of, real or personal property or money, or (ii) injury to persons. This reimbursement may take the form of money, appropriate service, or other compensation.
    - b. Professional evaluation. Referral for drug, alcohol, psychological, or medical evaluation, at the student's expense, by an appropriately certified or licensed professional. The student may choose the professional within the scope of practice and with the professional credentials as specified by the college. The student must sign all necessary releases to allow the college access to any such evaluation. The student's return to college may be conditioned upon compliance with recommendations set forth in the evaluation. If the student has been suspended, the student may remain suspended until the most recent evaluation finds that the student is capable of reentering the college and complying with the college's expectations for conduct.

- c. Restrictions on activities. A student may be subjected to the following restrictions:
  - i. Ineligible to hold any college office or position or any office in any student organization;
  - ii. Ineligible to participate in any college activity(ies); and/or
  - iii. Ineligible to represent the college outside the college community, including at any event or in any form of competition.
- d. Required activities. Assignment of appropriate tasks or responsibilities, or required attendance at an appropriate program, instructional course, or other educational activity, which may be at the student's expense.
- e. Protective or no contact order. An order directing a student to have limited or no contact with any specified student(s), college employee(s), member(s) of the college community, or college facility.
- f. Loss of state funding. A student found to have committed hazing shall forfeit any entitlement to state-funded grants, scholarships, or awards, pursuant to RCW 28B.10.902.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-060, filed 5/19/14, effective 6/19/14.]

**495C-121-070 - Faculty/administrator authority regarding classroom disruption.**

- 1. Faculty members and instructional administrators are authorized to take appropriate action to maintain order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives.
- 2. If a faculty member or instructional administrator determines that a student has created a disruption which makes it unreasonably difficult to maintain the learning and teaching environment or the decorum of a class or activity, he/she may suspend that student from the class or activity for up to a total of one day per day of disruption. The faculty member or administrator shall report this suspension to the student conduct officer, who shall have the option, depending on the severity, to treat the suspension as insufficient and also initiate further discipline under this chapter.

- 3. The suspension of up to one day per day of disruption shall not be subject to any further appeal or review. However, any further discipline imposed by the student conduct officer shall be processed in accordance with this chapter.
- 4. Any suspension initiated by a faculty member or instructional administrator under this section will not affect any student grading that is based directly on attendance.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-070, filed 5/19/14, effective 6/19/14.]

**495C-121-080 - Disciplinary records.**

- 1. Records of a disciplinary proceeding under this chapter are disciplinary records which must be maintained by the office of the vice-president of student services separately from student academic records and in accordance with applicable state records retention requirements.
- 2. Disciplinary records are confidential to the extent required by applicable laws, including the Family Educational Rights and Privacy Act. To the extent permitted by such laws, the respondent, or if a minor, the student's parent, may review his/her disciplinary records, obtain a copy of such records upon payment of any lawful charges for duplication, and/or authorize disclosure of such records.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-080, filed 5/19/14, effective 6/19/14.]

**495C-121-100 - Initiation of disciplinary action.**

- 1. All disciplinary actions will be initiated by the student conduct officer. If that officer is the subject of a complaint initiated by the respondent, the president shall, upon request and when feasible, designate another person to fulfill any such disciplinary responsibilities relative to the complainant.
- 2. The student conduct officer shall initiate possible disciplinary action by serving the respondent with written notice directing him or her to attend a disciplinary meeting. The notice shall briefly describe the factual allegations, the specific apparent misconduct under WAC 495C-121-050, and the range of possible disciplinary sanctions, and specify

the time and location of the meeting. At the meeting, the student conduct officer will present the allegations to the respondent and the respondent shall be afforded an opportunity to explain what took place. If the respondent fails to attend the meeting after proper service of notice, the student conduct officer may impose disciplinary sanction(s) and conditions based upon the available information.

3. Within ten days of the scheduled initial disciplinary meeting, and after considering the information obtained by investigation and any information presented by the respondent, the student conduct officer shall serve the respondent with a written decision setting forth the facts and conclusions supporting his or her decision, the specific student conduct code provisions found to have been violated, the discipline imposed, if any, the consequences if a student fails to satisfy any disciplinary condition(s) which are being imposed, and a notice of the respondent's appeal rights, if any, with an explanation of the consequences of failing to file a timely appeal.
4. The student conduct officer may take any of the following actions:
  - a. Terminate the proceeding, with any appropriate exoneration of the respondent or counseling or advice to the respondent. The respondent cannot appeal a termination of the proceedings;
  - b. Specify misconduct under WAC 495C-121-050 which he/she finds to have occurred and impose disciplinary sanction and/or condition(s), as described in WAC 495C-121-060; or
  - c. Refer the matter directly to the student conduct committee for a hearing and imposition of such disciplinary sanction and/or condition(s) as the committee deems appropriate. Such referral shall be to the attention of the chair of the committee with a copy served on the respondent.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-100, filed 5/19/14, effective 6/19/14.]

#### **495C-121-110 - Appeals and referrals—Routing.**

1. The respondent may appeal a disciplinary action by filing a written notice of appeal with the conduct review officer within twenty-one days of service of the student conduct officer's decision. Failure to file a timely notice of appeal constitutes a waiver of the

right to appeal, and the student conduct officer's decision shall be deemed final.

2. The notice of appeal must include a brief statement explaining why the respondent is seeking review.
3. Except as provided in WAC 495C-121-230 or elsewhere in these rules, the parties to an appeal shall be the respondent and the student conduct officer.
4. On appeal, the student conduct officer bears the burden of establishing the factual elements of the alleged misconduct by a preponderance of the evidence, i.e., that it is more likely than not that the respondent engaged in the alleged misconduct.
5. Imposition of a disciplinary sanction and conditions shall be stayed during an appeal, except for a summary suspension that has been imposed under WAC 495C-121-190.
6. The student conduct committee shall hear:
  - a. Appeals from disciplinary suspensions in excess of ten instructional days, and any related disciplinary condition(s);
  - b. Appeals from dismissals, and any related disciplinary condition(s); and
  - c. Cases referred by the student conduct officer, the conduct review officer, or the president.
7. Appeals from the following disciplinary sanctions and related disciplinary conditions shall be reviewed through a brief adjudicative proceeding:
  - a. Written disciplinary reprimands, and any related disciplinary condition(s);
  - b. Disciplinary probation, and any related disciplinary condition(s); and
  - c. Disciplinary suspensions of ten instructional days or less, and any related disciplinary condition(s).
8. Except as provided elsewhere in these rules, disciplinary warnings and terminations of proceedings are final actions and are not subject to appeal.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-110, filed 5/19/14, effective 6/19/14.]

#### **495C-121-120 - Brief adjudicative proceedings—Initial**

**hearing and decision.**

1. Brief adjudicative proceedings shall be conducted by a conduct review officer. The conduct review officer shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction to the student conduct officer.
2. Before making a decision, the conduct review officer shall schedule an informal hearing to provide each party an opportunity (a) to be informed of the agency's view of the matter, and (b) to explain the party's view of the matter.
3. The conduct review officer shall serve an initial decision upon the parties within ten days of the scheduled hearing. The initial decision shall contain a brief written statement of the reasons for the decision and information about how to seek review under WAC 495C-121-130.
4. If the conduct review officer, upon review, determines that the respondent's conduct may warrant imposition of a disciplinary suspension of more than ten instructional days or a dismissal, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-120, filed 5/19/14, effective 6/19/14.]

**495C-121-130 - Brief adjudicative proceedings—  
Review of initial decision.**

1. A party may obtain review of an initial decision by the president, by filing a written request for review with the conduct review officer within twenty-one days of service of the initial decision. That officer shall promptly forward the request to the president. If no timely request for review is filed, the initial decision shall become the final decision.
2. The president shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction.
3. During the review, the president shall give each party an opportunity to file a written statement explaining their view of the matter and shall make any inquiries to the parties which are necessary to ascertain whether the discipline should be modified or whether

the proceedings should be referred to the student conduct committee for a hearing.

4. The president shall serve a written decision on review on all parties within twenty days of the later of the filing of the request for review or any deadline for parties' explanatory statements. A request for review may be deemed to have been denied if the president does not serve a decision within those twenty days. The decision shall include a brief statement of its reasoning. The president's decision shall be the final college action in the matter, and shall include notice of any right to request reconsideration and of the right to seek judicial review under chapter 34.05 RCW.
5. If the president, upon review, determines that the respondent's conduct may warrant imposition of a dismissal or a disciplinary suspension of more than ten instructional days, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-130, filed 5/19/14, effective 6/19/14.]

**495C-121-140 - Student conduct committee—  
Formation.**

1. Proceedings of the student conduct committee shall be governed by the Administrative Procedure Act, chapter 34.05 RCW, and by the Model Rules of Procedure, chapter 10-08 WAC. To the extent there is a conflict between this chapter and chapter 10-08 WAC, this chapter shall control.
2. The student conduct committee shall consist of five members:
  - a. Two full-time students appointed by the student government to terms of up to one academic year;
  - b. Two faculty members appointed by the president to terms of up to two academic years, beginning in alternating years;
  - c. One faculty member or administrator, other than an administrator serving as a student conduct or conduct review officer, appointed as chair by the president for a term of up to two academic years.
  - d. Members may be reappointed for subsequent terms. Any member may be replaced by the appointing authority for the remainder of the term

for good cause shown.

3. The faculty member or administrator appointed as chair may take action on preliminary hearing matters prior to convening the committee. The chair shall receive annual training on protecting victims and promoting accountability in cases involving allegations of sexual misconduct.
4. A member of the student conduct committee shall not participate in any case in which he/she is a party, complainant, or witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction. Any party may petition for disqualification of a committee member pursuant to RCW 34.05.425(4).
5. Hearings may be heard by a quorum of three members of the committee, so long as one faculty member and one student are included on the hearing panel. Committee action may be taken upon a majority vote of all committee members attending the hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-140, filed 5/19/14, effective 6/19/14.]

**495C-121-150 - Student conduct committee—  
Prehearing proceedings.**

1. The student conduct committee chair shall serve all parties with written notice of the hearing not less than seven days in advance of the hearing date, as further specified in RCW 34.05.434 and WAC 10-08-040 and 10-08-045. The chair may shorten this notice period if both parties agree, and also may continue the hearing to a later time for good cause shown.
2. The chair may conduct prehearing conferences and/or make prehearing decisions concerning the simplification of issues, the extent and form of any discovery, issuance of protective orders, and similar procedural matters.
3. Discovery will be available as determined by the chair and in accordance with RCW 34.05.446. Upon request, the chair shall provide reasonable assistance to a party in obtaining relevant and admissible evidence that is within the college's control.
4. The chair may provide to the committee members in advance of the hearing copies of (a) the conduct officer's notification of imposition of discipline or

referral to the committee, and (b) the notice of appeal. If doing so, however, the chair should remind the members that these documents are not evidence of any facts they may allege.

5. Upon request filed at least five business days before the hearing by any party, or at the direction of the committee chair, the parties shall exchange, no later than the third business day prior to the hearing, lists of potential witnesses and copies of potential exhibits that they reasonably expect to present to the committee. Failure to participate in good faith in such a requested exchange may be cause for exclusion from the hearing of any witness or exhibit not disclosed, absent a showing of good cause for such failure.
6. The parties may agree before the hearing to designate specific exhibits as admissible without objection and, if they do so, whether the chair may provide copies of these admissible exhibits to the committee members before the hearing.
7. Communications between a committee member and any other nonmember hearing participant regarding any issue in the proceeding, other than communications necessary to procedural aspects of maintaining an orderly process, are generally prohibited without notice and opportunity for all parties to participate. Any improper "ex parte" communication shall be placed on the record, as further provided in RCW 34.05.455.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-150, filed 5/19/14, effective 6/19/14.]

**495C-121-160 - Student conduct committee—Hearings.**

1. Upon the failure of any party to attend or participate in a hearing, the chair may either:
  - a. Proceed with the hearing; or
  - b. Serve a default order in accordance with RCW 34.05.440.
2. The committee will ordinarily be advised by an assistant attorney general.
3. Each party may be accompanied at the hearing by a non-attorney assistant of his/her choice. A party other than the student conduct officer may elect to be represented by an attorney at his or her own cost, but



will be deemed to have waived that right unless, at least four business days before the hearing, written notice of the attorney's identity and participation is filed with the chair, with a copy to the student conduct officer. If such a party is represented by an attorney, the student conduct officer may also be represented by a second, appropriately screened, assistant attorney general.

4. The chair shall preside at the hearing and decide procedural questions that arise during the hearing, except as overridden by majority vote of the committee. Evidence shall be admitted or excluded in accordance with RCW 34.05.452. All testimony shall be given under oath or affirmation.
5. The hearing will ordinarily be closed to the public, in light of the Family Educational Rights and Privacy Act. However, if all parties agree on the record to open some or all of the proceedings, the chair shall determine any extent to which the hearing will be open. If any person disrupts the proceedings, the chair may exclude that person from the hearing room.
6. The chair shall afford opportunity to all parties to present their cases, and shall cause the hearing to be recorded by a method that he/she selects, in accordance with RCW 34.05.449. That recording, or a copy, shall be made available to any party upon request. Other recording shall also be permitted, in accordance with WAC 10-08-190.
7. The chair shall assure maintenance of the record of the proceeding which is required by RCW 34.05.476. This record shall be available upon request by any party for inspection and copying, except as limited by FERPA.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-160, filed 5/19/14, effective 6/19/14.]

**495C-121-170 - Student conduct committee—Initial decision.**

1. At the conclusion of the hearing, the committee shall permit the parties to make closing arguments in whatever form it wishes to receive them. The committee also may permit each party to propose findings, conclusions, and/or a proposed decision for its consideration. Only evidence presented at the hearing will be considered by the committee.
2. Within twenty days following the later of the

conclusion of the hearing or the committee's receipt of closing arguments, the committee shall issue an initial decision in accordance with RCW 34.05.461 and WAC 10-08-210. The initial order shall include:

- a. Findings on all material issues of fact and conclusions on all material issues of law, including which, if any, provisions of WAC 495C-121-050 were violated. Any findings based substantially on the credibility of evidence or the demeanor of witnesses shall be so identified.
  - b. A determination on appropriate disciplinary sanction and/or disciplinary conditions, if any. The committee may affirm, reverse, modify, or supplement any disciplinary sanction and/or disciplinary condition(s) imposed by the student conduct officer.
  - c. A statement that the initial order will become final unless a party seeks review of that decision in accordance with WAC 495C-121-180.
3. The chair shall cause copies of the initial decision to be served on the parties, including any legal counsel of record. The committee chair shall also promptly transmit the record of the committee's proceedings and a copy of its decision to the president.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-170, filed 5/19/14, effective 6/19/14.]

**495C-121-180 - Student conduct committee—Review of initial decision.**

1. A party who is aggrieved by the committee's initial decision may obtain review of that decision by filing a notice of appeal with the president within twenty-one days after it was served on that party. If no timely notice of appeal is filed, the initial decision shall become the final decision.
2. The notice of appeal must identify the specific findings of fact and/or conclusions of law in the initial decision that are challenged, and must contain an argument why the appeal should be granted.
3. The president may ask for additional argument from the parties on the issues raised in the notice of appeal. The president's review will ordinarily be limited to those issues, and shall be restricted to the committee hearing record. The president shall not engage in ex parte communication with any of the parties

regarding the appeal.

4. The president shall serve a written decision on review on all parties within forty-five days after receipt of the notice of appeal. The decision shall include appropriate findings and conclusions. Unless it remands the case to the committee for further proceedings or gives a right to request reconsideration, the president's decision shall be the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-180, filed 5/19/14, effective 6/19/14.]

#### **495C-121-190 - Summary suspension.**

1. Summary suspension is a temporary exclusion from specified college facilities and denial of access to all activities or privileges for which a respondent might otherwise be eligible, while an investigation, disciplinary procedures, and/or an appeal are pending.
2. The student conduct officer may impose a summary suspension if there is probable cause to believe, i.e., there are reasonable grounds for believing, that the respondent has committed misconduct under WAC 495C-121-050 and that either:
  - a. The situation involves an immediate danger to the public health, safety, or welfare which requires immediate college action; or
  - b. The student's behavior poses an ongoing threat of substantial disruption of, or interference with, the operations of the college.
3. A summary suspension shall be effective when the respondent receives written or oral notice of that suspension. If oral notice is given, a written notification must be served on the respondent within two business days of the oral notice. The written notification shall be entitled "Notice of Summary Suspension" and shall include:
  - a. The reasons for imposing the summary suspension, including a description of the misconduct and specification of the provisions of WAC 495C-121-050 allegedly violated;
  - b. The date, time, and location when the respondent must appear before the conduct review officer for

a hearing on the summary suspension; and

- c. The conditions, if any, under which the respondent may physically access college facilities or communicate with members of the college community. If the respondent is prohibited from entering college facilities, he/she may be given a notice against trespass which warns that his/her privilege to enter college facilities has been withdrawn, subject to any specified exceptions such as an invitation to meet with the student conduct officer or conduct review officer or to attend a scheduled disciplinary hearing, and that he/she shall be considered to be trespassing and subject to arrest for criminal trespass for any violation.
4. The hearing before the conduct review officer shall be scheduled as soon as practicable after service of the notice of summary suspension. If the respondent fails to appear at the scheduled time, the conduct review officer may order that the summary suspension remain in place. During the summary suspension hearing, the issues shall be:
  - a. Whether the requirements under subsection (2) of this section are satisfied; and
  - b. Whether the summary suspension should be continued pending the conclusion of disciplinary proceedings and/or should be less restrictive in scope.
5. As soon as practicable following the hearing, the conduct review officer shall issue, and serve on the respondent and student conduct officer, a written decision which addresses the issues at the hearing. The conduct review officer shall also provide information about the decision, to the extent legally permissible under FERPA, to all persons and offices who may be bound or protected by it.
6. The respondent may request a de novo review of the summary suspension hearing decision by the student conduct committee. The review will be scheduled promptly. Either party may request the review to be consolidated with any other disciplinary proceeding arising from the same matter.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-190, filed 5/19/14, effective 6/19/14.]

#### **495C-121-200 - Supplemental definitions.**

The following supplemental definitions apply in student disciplinary matters involving allegations of sexual misconduct by a student:

1. A "complainant" is an alleged victim of sexual misconduct.
2. "Sexual misconduct" has the meaning ascribed to this term in WAC 495C-121-050.
3. "Title IX compliance officer" is the college position designated by the president as having the primary direct responsibilities related to Title IX, 20 U.S.C. §§ 1681-88.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-200, filed 5/19/14, effective 6/19/14.]

**WAC 495C-121-210 Supplemental sexual misconduct procedures.**

Pursuant to RCW 28B.50.140(13) and Title IX of the Education Act Amendments of 1972, 20 U.S.C. §1681, Clover Park Technical College may impose disciplinary sanctions against a student who commits, attempts to commit, or aids, abets, incites, encourages, or assists another person to commit, an act(s) of sexual misconduct. The Supplemental procedures provided for in WAC 495C-121-210 through WAC 495C-121-270 shall supplement the other procedural requirements of this Chapter and will govern all student conduct proceedings regarding alleged acts of sexual misconduct. In the event of a conflict between the supplemental procedure and other requirements of this Chapter, the requirements of the supplemental procedure shall control.

For purposes of this supplemental procedure, "sexual misconduct" encompasses the following conduct:

1. Quid pro quo harassment. A college employee conditioning the provision of an aid, benefit, or service on an individual's participation in unwelcome sexual conduct.
2. Hostile environment. Unwelcome conduct that a reasonable person would find to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to Clover Park Technical College's educational programs or activities, or employment.
3. Sexual assault. Sexual assault includes the following conduct:

- a. Nonconsensual sexual intercourse. Any actual or attempted sexual intercourse (anal, oral, or vaginal), however slight, with any object or body part, by a person upon another person, that is without consent and/or by force. Sexual intercourse includes anal or vaginal penetration by a penis, tongue, finger, or object, or oral copulation by mouth to genital contact or genital to mouth contact.
  - b. Nonconsensual sexual contact. Any actual or attempted sexual touching, however slight, with any body part or object, by a person upon another person that is without consent and/or by force. Sexual touching includes any bodily contact with the breasts, groin, mouth, or other bodily orifice of another individual, or any other bodily contact in a sexual manner.
  - c. Incest. Sexual intercourse or sexual contact with a person known to be related to them, either legitimately or illegitimately, as an ancestor, descendant, brother, or sister of either wholly or half related. Descendant includes stepchildren and adopted children under the age of eighteen (18).
  - d. Statutory rape. Consensual sexual intercourse between someone who is eighteen (18) years of age or older and someone who is under the age of sixteen (16).
4. Domestic violence. Physical violence, bodily injury, assault, the infliction of fear of imminent physical harm, sexual assault, or stalking committed by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse, by a person similarly situated to a spouse of the victim under the domestic or family violence laws of state of Washington, or by any other person against an adult or youth victim who is protected from that person's acts under the domestic or family violence laws of the State of Washington, RCW 26.50.010.
  5. Dating violence. Physical violence, bodily injury, assault, the infliction of fear of imminent physical harm, sexual assault, or stalking committed by a person (i) who is or has been in a social relationship of a romantic or intimate nature with the victim; and (ii) where the existence of such a relationship shall be determined based on a consideration of the following factors:
    - a. The length of the relationship;

- b. The type of relationship; and
- c. The frequency of interaction between the persons involved in the relationship.
- d. Stalking. Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for their safety or the safety of others or suffer substantial emotional distress.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-215 Title IX jurisdiction.**

1. This supplemental procedure applies only if the alleged misconduct:
  - a. Occurred in the United States;
  - b. Occurred during a Clover Park Technical College educational program or activity; and
  - c. Meets the definition of sexual harassment as that term is defined in this supplemental procedure.
2. For purposes of this supplemental procedure, an “educational program or activity” is defined as locations, events, or circumstances over which Clover Park Technical College exercised substantial control over both the respondent and the context in which the alleged sexual harassment occurred. This definition includes any building owned or controlled by a student organization that is officially recognized by the college.
  - a. Proceedings under this supplemental procedure must be dismissed if the decision maker determines that one or all of the requirements of WAC 495C-121-0XX (1)(a)-(c), have not been met. Dismissal under this Title IX supplemental procedure does not prohibit the college from pursuing other disciplinary action based on in situations where the allegations against the respondent, if true, would constitute violations of other provisions of the college’s student conduct code, WAC 495C-121.
  - b. If the student conduct officer determines the facts in the investigation report are not sufficient to support Title IX jurisdiction and/or pursuit of a Title IX violation, the student conduct officer will issue a notice of dismissal in whole or part to both parties explaining why some or all of the Title IX claims have been dismissed.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-220 Supplemental complaint process.**

With respect to complaints or other reports of alleged sexual misconduct by a student:

1. The college's Title IX compliance officer shall investigate, or assure investigation of, complaints or other reports of alleged sexual misconduct by a student. The investigation will be completed in a timely manner and the results of the investigation shall be referred to the student conduct officer for possible disciplinary action.
2. Informal dispute resolution shall not be used to resolve sexual misconduct complaints without written permission from both the complainant and the respondent. If the parties elect to mediate a dispute, either party shall be free to discontinue the mediation at any time. Mediation shall not be used to resolve complaints involving allegations of sexual violence.
3. College personnel will honor requests to keep sexual misconduct complaints confidential to the extent this can be done without unreasonably risking the health, safety, and welfare of the complainant or other members of the college community or compromising the college's duty to investigate and process such complaints.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-225 Initiation of discipline.**

1. Upon receiving the Title IX investigation report from the Title IX compliance officer, the student conduct officer will independently review the report to determine whether there are sufficient grounds to pursue a disciplinary action against the respondent for engaging in prohibited conduct under Title IX.
2. If the student conduct officer determines that there are sufficient grounds to proceed under these supplement procedures, the student conduct officer will initiate a Title IX disciplinary proceeding by filing a written disciplinary notice with the chair of the student conduct committee and serving the notice on the respondent and the complainant, and their respective advisors. The notice must:
  - a. Set forth the basis for Title IX jurisdiction;

- b. Identify the alleged Title IX violation(s);
- c. Set forth the facts underlying the allegation(s);
- d. Identify the range of possible sanctions that may be imposed if the respondent is found responsible for the alleged violation(s);
- e. Explain that the parties are entitled to be accompanied by their chosen advisors during the hearing and that:
  - i. The advisors will be responsible for questioning all witnesses on the party's behalf;
  - ii. An advisor may be an attorney; and
  - iii. The college will appoint the party an advisor of the college's choosing at no cost to the party, if the party fails to do so; and
- 3. Explain that if a party fails to appear at the hearing, a decision of responsibility may be made in their absence.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-230 Appeal Rights. REPEALED**

*This Section is repealed in its entirety.*

#### **WAC 495C-121-235 Pre-Hearing Procedure.**

- 1. Upon receiving the disciplinary notice, the chair of the student conduct committee will send a hearing notice to all parties, in compliance with WAC 495C-121-150. In no event will the hearing date be set less than ten (10) days after the Title IX compliance officer provides the final investigation report to the parties.
- 2. A party may choose to have an attorney serve as their advisor at the party's own expense. This right will be waived unless, at least five (5) days before the hearing, the attorney files a notice of appearance with the committee chair with copies to all parties and the student conduct officer.
- 3. In preparation for the hearing, the parties will have equal access to all evidence gathered by the investigator during the investigation, regardless of whether the college intends to offer the evidence at the hearing.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-240 Rights of parties.**

- 1. Clover Park Technical College's student conduct procedures, WAC 495C-121, and this supplemental procedure shall apply equally to all parties.
- 2. The college bears the burden of offering and presenting sufficient testimony and evidence to establish that the respondent is responsible for a Title IX violation by a preponderance of the evidence.
- 3. The respondent will be presumed not responsible until such time as the disciplinary process has been finally resolved.
- 4. During the hearing, each party shall be represented by an advisor. The parties are entitled to an advisor of their own choosing and the advisor may be an attorney. If a party does not choose an advisor, then the Title IX compliance officer will appoint an advisor of the college's choosing on the party's behalf at no expense to the party.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-250 Evidence.**

The introduction and consideration of evidence during the hearing is subject to the following procedures and restrictions:

- 1. **Relevance:** The chair of the student conduct committee shall review all questions for relevance and shall explain on the record their reasons for excluding any question based on lack of relevance.
- 2. **Relevance means** that information elicited by the question makes facts in dispute more or less likely to be true.
- 3. Questions or evidence about a complainant's sexual predisposition or prior sexual behavior are not relevant and must be excluded, unless such question or evidence:
- 4. Is asked or offered to prove someone other than the respondent committed the alleged misconduct; or
- 5. Concerns specific incidents of prior sexual behavior between the complainant and the respondent, which

are asked or offered on the issue of consent.

6. Cross-examination required: If a party or witness does not submit to cross-examination during the live hearing, the committee must not rely on any statement by that party or witness in reaching a determination of responsibility.
7. No negative inference: The committee may not make an inference regarding responsibility solely on a witness's or party's absence from the hearing or refusal to answer questions.
  - a. Privileged evidence: The committee shall not consider legally privileged information unless the holder has effectively waived the privilege. Privileged information includes, but is not limited to, information protected by the following:
    - b. Spousal/domestic partner privilege;
    - c. Attorney-client and attorney work product privileges;
    - d. Privileges applicable to members of the clergy and priests;
    - e. Privileges applicable to medical providers, mental health therapists, and counsellors;
    - f. Privileges applicable to sexual assault and domestic violence advocates; and
    - g. Other legal privileges identified in RCW 5.60.060.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-260 Initial order.**

In addition to complying with WAC 495C-121, the student conduct committee will be responsible for conferring and drafting an initial order that:

1. Identifies the allegations of sexual harassment;
2. Describes the grievance and disciplinary procedures, starting with filing of the formal complaint through the determination of responsibility, including notices to parties, interviews with witnesses and parties, site visits, methods used to gather evidence, and hearings held;
3. Makes findings of fact supporting the determination of responsibility;

4. Reaches conclusions as to whether the facts establish whether the respondent is responsible for engaging in sexual harassment in violation of Title IX;
5. Contains a statement of, and rationale for, the committee's determination of responsibility for each allegation;
6. Describes any disciplinary sanction or conditions imposed against the respondent, if any;
7. Describes to what extent, if any, complainant is entitled to remedies designed to restore or preserve complainant's equal access to Clover Park Technical College's education programs or activities; and
8. Describes the process for appealing the initial order to the college president.

The chair of the student conduct committee will serve the initial order on the parties simultaneously.

[Statutory Authority: RCW 28B.50.140.]

#### **WAC 495C-121-270 Appeals.**

1. The parties shall have the right to appeal from the initial order's determination of responsibility and/or dismissal of an allegation(s) of sexual harassment in a formal complaint. The right to appeal will be subject to the same procedures and timeframes set forth in WAC 495C-121-080.
2. The president or designee will determine whether the grounds for appeal have merit, provide the rationale for this conclusion, and state whether the disciplinary sanction and condition(s) imposed in the initial order are affirmed, vacated, or amended, and, if amended, set forth any new disciplinary sanction and/or condition(s).
3. President's office shall serve the final decision on the parties simultaneously.

[Statutory Authority: RCW 28B.50.140.]

## Definitions

The following definitions shall apply for the purposes of this student conduct code, chapter 495C-121 WAC:

1. "College" means Clover Park Technical College,

## College District 29.

2. "College facilities" includes all campuses of the college, wherever located, and all land, buildings, vehicles, equipment, and other real and personal property which are owned, leased, used, or controlled by the college.
3. "Committee" and "student conduct committee" means the committee which is formed under WAC 495C-121-140 and which hears the matters specified in WAC 495C-121- 110.
4. "Conduct review officer" is the vice-president of student services or other college administrator designated by the president to be responsible for receiving and then either reviewing or referring an appeal of student disciplinary action in accordance with WAC 495C-121- 110 and following sections of this chapter. The president may reassign any and all of the conduct review officer's responsibilities as set forth in this chapter as he/she deems appropriate.
5. "Day" means a calendar day, except that when a "business day" is specified, business day means a weekday, excluding weekends and college holidays.
6. "Disciplinary action" is the process by which the student conduct officer, or the committee upon a referral, imposes discipline against a student for violation of WAC 495C-121-050. Disciplinary action does not include instructional decisions and actions which are under the authority of faculty members and instructional administrators, such as determinations of academic credit and grading; any such determinations, and any review or appeal of these, are outside the scope of this chapter.
7. "Disciplinary appeal" is the process by which an aggrieved student can appeal discipline, as provided in WAC 495C-121-110 through 495C-121-180.
8. "Family Educational Rights and Privacy Act" and "FERPA" mean the law and regulations known by those names (20 U.S.C. §1232g; 34 C.F.R. Part 99).
9. "Filing" is delivery of a document to the college official who is designated under this chapter to receive it for the purpose of review of a disciplinary action. Unless otherwise provided, filing shall be accomplished by:
  - a. Hand delivery of the document to that official or the official's assistant during regular office hours; or
  - b. Sending the document both by first class mail postage prepaid to the official's office and by e-mail to his/her college e-mail address.
10. "Hazing" as used in RCW 28B.10.901 and 28B.10.902, includes any act committed as part of a person's recruitment, initiation, pledging, admission into, or affiliation with a student organization, athletic team, or living group or any pastime or amusement engaged in with respect to such an organization, athletic team, or living group that causes, or is likely to cause, bodily danger or physical harm, or serious psychological or emotional harm, to any student or other per[1]son attending a public or private institution of higher education or other postsecondary educational institution in this state, including causing, directing, coercing, or forcing a person to consume any food, liquid, alcohol, drug, or other substance which subjects the person to risk of such harm, regardless of the person's willingness to participate. "Hazing" does not include customary athletic events or other similar contests or competitions.
11. "Includes" and "including" means contained as part of a larger described whole or grouping, but these terms are not a limitation and mean "but not limited to."
12. "President" is the president of the college. The president may delegate any of his or her responsibilities under this chapter as he/she deems appropriate.
13. "Respondent" is the student against whom disciplinary action is initiated.
14. "Service" is the delivery of a document or copy of a document to a party. Unless otherwise provided, service upon a party shall be accomplished by:
  - a. Hand delivery of the document to the party; or
  - b. Sending the document both by first class and/or certified mail postage prepaid to the party's last known address and by e-mail to the e-mail address shown in the college's records. Service is deemed complete either upon hand delivery or when the document has been both deposited in the mail and e-mailed.
15. "Student" includes all persons taking courses at or through the college, whether on a full-time or part-time basis, and whether such courses are credit courses, noncredit courses, online courses, or otherwise. Persons who withdraw after allegedly

violating the code, who are not officially enrolled for a particular term but who have a continuing relationship with the college, or who have been notified of their acceptance for admission are considered "students."

16. "Student conduct officer" is a college administrator designated by the president or vice-president of student services to be responsible for investigating allegations of student misconduct and taking disciplinary action as provided in WAC 495C-121-100. The president or vice-president of student services may reassign any of the student conduct officer's responsibilities under this chapter as he/she deems appropriate.
17. "Vice-president of student services" is the position which reports directly to the president and which the president assigns overall operational responsibility for this chapter. The president may reassign, or the vice-president may delegate, any such responsibility as he/she deems appropriate.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-010, filed 5/19/14, effective 6/19/14.]

## Authority

The board of trustees, acting pursuant to RCW 28B.10.528 and 28B.50.140(14), delegates to the president the authority to administer student disciplinary actions and appeals. The president may delegate and/or further assign responsibilities related to student discipline to other college officials and positions.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-020, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-020, filed 5/19/14, effective 6/19/14.]

## Jurisdiction

1. The student conduct code, chapter 495C-121 WAC, shall apply to student conduct that occurs:
  - a. In or on college facilities;
  - b. At or in connection with college-sponsored activities; or
  - c. Off-campus when in the judgment of the college it adversely affects the college community or the pursuit of its objectives.
2. Jurisdiction extends to, but is not limited to, locations where students or student groups are engaged in

official college activities, including foreign or domestic travel, activities funded or sponsored by the associated students, athletic events or recreational events, training internships, cooperative and distance education, online education, practicums, supervised work experiences, or any other college-sanctioned social or club activities and college[1]sanctioned housing.

3. Students are responsible for their conduct from notification of admission to the college through the actual receipt of a certificate or degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment.
4. These standards shall apply to a student's conduct even if the student withdraws from college while a disciplinary matter is pending.
5. In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state, or local laws to civil and criminal authorities for disposition. The college may proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil proceedings or criminal prosecution.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-030, filed 5/19/14, effective 6/19/14.]

## Student Rights

As members of the academic community, students are encouraged to develop the capacity for critical judgment and to engage in an independent search for truth. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students should exercise their freedom with responsibility. The responsibility to secure and to respect general conditions conducive to the freedom to learn is shared by all members of the college community.

The following enumerated rights are guaranteed to each student within the limitations of statutory law and college policy which are deemed necessary to achieve the educational goals of the college:

1. Academic freedom.
  - a. Students are guaranteed the rights of free inquiry,



expression, and assembly upon and within college facilities that are generally open and available to the public.

- b. Students are free to pursue appropriate educational objectives from among the college’s curricula, programs, and services, subject to the limitations of RCW 28B.50.090 (3)(b).
  - c. Students shall be protected from academic evaluation which is arbitrary, prejudiced, or capricious, but are responsible for meeting the standards of academic performance established by each of their instructors.
  - d. Students have the right to a learning environment which is free from unlawful discrimination, inappropriate and disrespectful conduct, and any and all harassment, including sexual harassment.
2. Due process.
- a. The rights of students to be secure in their persons, papers, and effects against unreasonable college searches and seizures are guaranteed.
  - b. No disciplinary sanction may be imposed on any student without notice to the accused of the nature of the charges.
  - c. A student accused of violating this code of conduct is entitled, upon request, to the procedural due process set forth in this chapter.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-040, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-040, filed 5/19/14, effective 6/19/14.]

## Prohibited Student Conduct

The college may impose disciplinary sanctions against a student or student group who commits, attempts to commit, or aids, abets, incites, encourages, or assists another person to commit any act of misconduct, which includes, but is not limited to, the following:

- 1. Academic dishonesty. Any act of academic dishonesty, including cheating, plagiarism, and fabrication.
  - a. Cheating includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment or requirement.
  - b. Plagiarism includes taking and using as one’s

own, without proper attribution, the ideas, writings, or work of another person in completing an academic assignment or requirement.

- c. Fabrication includes falsifying data, information, or citations in completing an academic assignment or requirement, or providing false or deceptive information to an instructor concerning the completion of an assignment or requirement, including submitting for credit without authorization academic work also submitted for credit in another course.
2. Other dishonesty. Any other act of dishonesty, including:
- a. Forgery, alteration, submission of falsified documents, or misuse of any college document, record, or instrument of identification;
  - b. Tampering with an election conducted by or for college students; or
  - c. Furnishing false information, or failing to furnish correct or complete information, in response to the request or requirement of a college official or employee.
3. Conduct which significantly obstructs or disrupts any operation of the college, any college meeting, any college class or other activity, any activity authorized to occur at a college facility, or any college-sponsored activity, including obstructing the free flow of pedestrian or vehicular movement or blocking access to or from any college facility or college-sponsored event.
4. Assault, physical abuse, verbal abuse, threat(s), intimidation, harassment, bullying, stalking, reckless conduct, or other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person or another person’s property or which unreasonably disrupts the educational environment. For purposes of this subsection:
- a. Bullying is severe or pervasive physical or verbal abuse involving an apparent power imbalance between the aggressor and victim.
  - b. Stalking is intentional and repeated following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person

- is frightened, intimidated, or harassed, even if the perpetrator lacks such an intent.
- c. Reckless conduct means acts performed with a heightened degree of carelessness or indifference so as to create a significant risk of physical, mental, or emotional harm to another person.
5. Cyber misconduct. Cyberstalking, cyberbullying or online harassment. Use of electronic communications including, but not limited to, electronic mail, instant messaging, texting, electronic bulletin boards, and social media sites, to harass, abuse, bully, or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health, safety, or well-being of another person. Prohibited activities include, but are not limited to, unauthorized monitoring of another's electronic communications directly or through spyware, sending threatening messages, disrupting electronic communications, sending a computer virus or malware, sending false messages to third parties using another's identity, nonconsensual recording of sexual activity, or nonconsensual distribution of a recording of sexual activity.
6. Property violation. Damage to, or theft or misuse of, real or personal property or money of:
- The college or state, including college facilities;
  - Any college student, official, employee, or organization; or
  - Any other member of the college community or a college organization. Property violation also includes possession of such property or money after it has been stolen.
7. Failure to comply with directive. Failure to comply with the direction of a college official or employee who is acting in the legitimate performance of his or her duties, including failure to properly identify oneself to such a person when requested to do so.
8. Weapons. Holding, wearing, transporting, storing, or otherwise possessing any firearm, dagger, sword, knife or other cutting or stabbing instrument, club, explosive device, or any other weapon or device which is apparently capable of producing bodily harm, on or in any college facility, subject to the following exceptions:
- Commissioned law enforcement personnel or legally authorized military personnel while in performance of their duties;
  - College-owned knives, tools, etc., that are being used for a legitimate educational purpose as part of a college instructional program;
  - A student with a valid concealed pistol license may store a pistol in his or her vehicle parked on campus in accordance with RCW 9.41.050 (2) or (3), provided the vehicle is locked and the pistol is concealed from view;
  - The president may grant permission to bring such a weapon or device on or into a college facility when he/ she determines that it is reasonably related to a legitimate pedagogical purpose, provided that such permission shall be in writing and shall be subject to all terms and conditions incorporated in that writing; and
  - This policy does not apply to the possession and/or use of disabling chemical sprays when possessed and/ or used for self-defense.
9. Hazing. Hazing is any act committed as part of: (i) A person's recruitment, initiation, pledging, admission into, or affiliation with a student group; (ii) Any pastime or amusement engaged in with respect to such a student group; or (iii) That causes, or is likely to cause, bodily danger or physical harm, or serious psychological or emotional harm to any student. (b) Examples of hazing include, but not limited to: (i) Causing, directing, coercing, or forcing a person to consume any food, liquid, alcohol, drug or other substance which subjects the person to risk of such harm; (ii) Humiliation by ritual act; (iii) Striking another person with an object or body part; (iv) Causing someone to experience excessive fatigue, or physical and/or psychological shock; or (v) Causing someone to engage in degrading or humiliating games or activities that create a risk of serious psychological, emotional, and/or physical harm. (c) "Hazing" does not include customary athletic events or similar contests or competitions. (d) Consent is not a valid defense against hazing.
10. Alcohol, drug, and tobacco violations.
- Alcohol. Use, possession, delivery, sale, or being observably under the influence of any alcoholic beverage, except as permitted by law and applicable college policies.
  - Marijuana. Use, possession, delivery, sale, or being observably under the influence of

marijuana, the psychoactive compounds found in marijuana, or any product containing marijuana or such compounds that is intended for human consumption, regardless of form. While state law permits the recreational use of marijuana, federal law prohibits such use on college facilities or in connection with college activities.

- c. Drugs. The use, possession, delivery, sale, or being observably under the influence of any legend drug, including anabolic steroids, androgens, or human growth hormones as defined in chapter 69.41 RCW, or any other controlled substance under chapter 69.50 RCW, except as prescribed for a student's use by a licensed health care practitioner.
  - d. Tobacco, electronic cigarettes, and related products. Use of tobacco, electronic cigarettes or smoking devices, and/or related products on or in any college facility is prohibited, except that such use in a designated smoking area or in a closed private vehicle is permitted when consistent with applicable law and rules. "Related products" include cigarettes, pipes, bidi, clove cigarettes, water pipes, hookahs, chewing tobacco, and snuff.
11. Lewd conduct. Conduct which is lewd or obscene.
12. Discriminatory conduct. Discriminatory conduct which harms or adversely affects any member of the college community because of her/his race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification.
13. Sexual misconduct. Any act of sexual misconduct, including sexual harassment, sexual intimidation, and sexual violence.
- a. Sexual harassment means unwelcome conduct of a sexual nature, including unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature, that is sufficiently serious as to deny or limit, and that does deny or limit, based on sex, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for campus community members.
  - b. Sexual intimidation. The term "sexual intimidation" incorporates the definition of "sexual harassment" and means threatening or emotionally distressing conduct based on sex including, but not limited to, nonconsensual recording of sexual activity or distribution of such a recording.
  - c. Sexual violence is a type of sexual discrimination and harassment. Nonconsensual sexual intercourse, nonconsensual sexual contact, domestic violence, dating violence, and stalking are all types of sexual violence.
  - d. Nonconsensual sexual intercourse is any sexual intercourse (anal, oral, or vaginal), however slight, with any object, by a person upon another person, that is without consent and/or by force. Sexual intercourse includes anal or vaginal penetration by a penis, tongue, finger or object, or oral copulation by mouth to genital contact or genital to mouth contact.
  - e. Nonconsensual sexual contact is any intentional sexual touching, however slight, with any object, by a person upon another person that is without consent and/or by force. Sexual touching includes any bodily contact with the breasts, groin, mouth, or other bodily orifice of another individual or any other bodily contact in a sexual manner.
  - f. Domestic violence includes asserted violent misdemeanor and felony offenses committed by the victim's current or former spouse, current or former cohabitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.
  - g. Dating violence means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.
  - h. Stalking means intentional and repeated harassment or following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such intent.
  - i. Consent means knowing, voluntary and clear

permission by word or action, to engage in mutually agreed upon sexual activity. Each party has the responsibility to make certain that the other has consented before engaging in the activity. For consent to be valid, there must be at the time of the act of sexual intercourse or sexual contact actual words or conduct indicating freely given agreement to have sexual intercourse or sexual contact.

A person cannot consent if he or she is unable to understand what is happening or is disoriented, helpless, asleep or unconscious for any reason, including due to alcohol or other drugs. An individual who engages in sexual activity when the individual knows, or should know, that the other person is physically or mentally incapacitated has engaged in nonconsensual conduct. Intoxication is not a defense against allegations that an individual has engaged in nonconsensual sexual conduct.

14. Harassment. Unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit, and that does deny or limit, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for other campus community members. Protected status includes a person's race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification. See "Sexual misconduct" for the definition of "sexual harassment." Harassing conduct may include, but is not limited to, physical conduct, verbal, written, social media, and electronic.

15. Retaliation. Taking adverse action against any individual for reporting, providing information, or otherwise participating in a process for addressing alleged violations of federal, state, or local law, or college policies, including allegations of discrimination or harassment.

16. Misuse of electronic resources. Theft or other misuse of computer time or other electronic information resources of the college, which includes:

- a. Unauthorized use of such resources or opening of a file, message, or other item;

- b. Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;

- c. Unauthorized use or distribution of someone else's password or other identification;

- d. Use of such time or resources to interfere with someone else's work;

- e. Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;

- f. Use of such time or resources to interfere with normal operation of the college's computing system or other electronic information resources;

- g. Use of such time or resources in violation of applicable copyright or other law;

- h. Adding to or otherwise altering the infrastructure of the college's electronic information resources without authorization; or

- i. Failure to comply with the college's policies or procedures governing the use of such time or resources.

17. Unauthorized access. Unauthorized possession, duplication, or other use of a key, keycard, or other restricted means of access to college property, or unauthorized entry onto or into college property.

18. Safety violations. Any nonaccidental conduct that violates, interferes with, or otherwise compromises any law, rule, policy, procedure, or equipment relating to the safety and security of college facilities or the college community, including tampering with fire safety equipment or triggering false alarms or other emergency response systems.

19. Motor vehicle operation. Operation of any motor vehicle in an unsafe manner or contrary to posted signs or college procedures.

20. Violation of laws or policies. Violation of any federal, state, or local law or regulation, or college rule, policy, or procedure, which regulates the behavior of the college's students, including a parking rule.

21. Student procedures violations. Misuse of or failure to follow any of the procedures relating to student complaints or misconduct, including:

- a. Falsification or misrepresentation of information;
  - b. Failure to obey a subpoena;
  - c. Disruption or interference with the orderly conduct of a proceeding;
  - d. Destroying or altering potential evidence, or attempting to intimidate or otherwise improperly pressure a witness or potential witness;
  - e. Attempting to influence the impartiality of, or harassing or intimidating, a student conduct committee member or other disciplinary official; or
  - f. Failure to comply with any disciplinary action, term, or condition imposed under this chapter.
22. Ethical violation. Ethical violations include, but are not limited to, breach of a generally recognized and published code of ethics or standard of professional practice that governs the conduct of a particular profession, which the student has been specifically informed about and is required to adhere to as a condition of enrolling in a course or participating in an educational program.

In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state or local laws to civil and criminal authorities for disposition. The college shall proceed with student disciplinary proceedings regardless of whether the underlying conduct is subject to civil or criminal prosecution.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-050, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-050, filed 5/19/14, effective 6/19/14.]

## Disciplinary Sanctions and Conditions

1. Disciplinary sanctions. The following disciplinary sanctions may be imposed upon students found to have violated the student conduct code:
  - a. Disciplinary warning. An oral statement to a student that there is a violation and that any further violation may be cause for further disciplinary action. Although verbal, the student conduct officer should make a record of the warning. The respondent cannot appeal a disciplinary warning.
  - b. Written disciplinary reprimand. A written notice informing a student that he/she has violated one or

more terms of the code of conduct and that future misconduct involving the same or similar behavior may result in the imposition of a more severe disciplinary sanction.

- c. Disciplinary probation. A written notice placing specific term(s) and condition(s) upon the student's continued attendance at the college. Disciplinary probation may be for a limited period of time or for the duration of the student's attendance at the college.
  - d. Disciplinary suspension. Temporary revocation of enrollment and termination of student status, for a stated period of time. The student may be prohibited from coming onto any college facility and may be subject to law enforcement action for criminal trespass for violating that prohibition. There will be no refund of tuition or fees for the quarter in which the action is taken.
  - e. Dismissal. Revocation of enrollment and of all rights and privileges of membership in the college community, and exclusion from college facilities, without any time limitation. There will be no refund of tuition or fees for the quarter in which the action is taken. The student may be subject to law enforcement action for criminal trespass for violating that exclusion. A dismissal may be rescinded only by a written decision of the president, for documented good cause.
2. Disciplinary conditions. Disciplinary conditions that may be imposed alone or in conjunction with the imposition of a disciplinary sanction under subsection (1) of this section include:
    - a. Restitution. Reimbursement for
      - i. damage to, or theft or misuse of, real or personal property or money, or
      - ii. injury to persons. This reimbursement may take the form of money, appropriate service, or other compensation.
    - b. Professional evaluation. Referral for drug, alcohol, psychological, or medical evaluation, at the student's expense, by an appropriately certified or licensed professional. The student may choose the professional within the scope of practice and with the professional credentials as specified by the college. The student must sign all necessary releases to allow the college access to any such evaluation. The student's return to

college may be conditioned upon compliance with recommendations set forth in the evaluation. If the student has been suspended, the student may remain suspended until the most recent evaluation finds that the student is capable of reentering the college and complying with the college's expectations for conduct.

- c. Restrictions on activities. A student may be subjected to the following restrictions:
  - i. Ineligible to hold any college office or position or any office in any student organization;
  - ii. Ineligible to participate in any college activity(ies); and/or
  - iii. Ineligible to represent the college outside the college community, including at any event or in any form of competition.
- d. Required activities. Assignment of appropriate tasks or responsibilities, or required attendance at an appropriate program, instructional course, or other educational activity, which may be at the student's expense.
- e. Protective or no contact order. An order directing a student to have limited or no contact with any specified student(s), college employee(s), member(s) of the college community, or college facility.
- f. Loss of state funding. A student found to have committed hazing shall forfeit any entitlement to state-funded grants, scholarships, or awards, pursuant to RCW 28B.10.902.

[Statutory Authority: RCW 28B.50.140. WSR 16-06-026, § 495C-121-060, filed 2/22/16, effective 3/24/16; WSR 14-11-070, § 495C-121-060, filed 5/19/14, effective 6/19/14.]

WAC 495C-121-065 Hazing prohibited—

#### Sanctions.

1. Hazing by a student or student group is prohibited pursuant to WAC 495C-121-050.
2. No student may conspire to engage in hazing or participate in hazing of another. State law provides that hazing is a criminal offense, punishable as a misdemeanor.
3. Washington state law provides that:

- a. Any student group that knowingly permits hazing is strictly liable for harm caused to persons or property resulting from hazing. If the organization, association, or student living group is a corporation whether for profit or nonprofit, the individual directors of the corporation may be held individually liable for damages.
- b. Any person who participates in the hazing of another shall forfeit an entitlement to state-funded grants, scholarships, or awards for a period of time determined by the college.
- c. Student groups that knowingly permits hazing to be conducted by its members or by others subject to its direction or control shall be deprived of any official recognition or approval granted by the college.
- d. Student groups found responsible for violating the code of student conduct, college antihazing policies, or state or federal laws relating to hazing or offenses related to alcohol, drugs, sexual conduct, or physical assault will be disclosed in a public report issued by the college setting forth the name of the student group, the date the investigation began, the date the investigation ended, a finding of responsibility, a description of the incident(s) giving rise to the finding, and the details of the sanction(s) imposed.

## Faculty/Administrator Authority Regarding Classroom Disruption

1. Faculty members and instructional administrators are authorized to take appropriate action to maintain order and proper conduct in the classroom and the cooperation of students in fulfilling course objectives.
2. If a faculty member or instructional administrator determines that a student has created a disruption which makes it unreasonably difficult to maintain the learning and teaching environment or the decorum of a class or activity, he/she may suspend that student from the class or activity for up to a total of one day per day of disruption. The faculty member or administrator shall report this suspension to the student conduct officer, who shall have the option, depending on the severity, to treat the suspension as insufficient and also initiate further discipline under this chapter.
3. The suspension of up to one day per day of disruption shall not be subject to any further appeal or review.

However, any further discipline imposed by the student conduct officer shall be processed in accordance with this chapter.

4. Any suspension initiated by a faculty member or instructional administrator under this section will not affect any student grading that is based directly on attendance.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-070, filed 5/19/14, effective 6/19/14.]

## Disciplinary Records

1. Records of a disciplinary proceeding under this chapter are disciplinary records which must be maintained by the office of the vice-president of student services separately from student academic records and in accordance with applicable state records retention requirements.
2. Disciplinary records are confidential to the extent required by applicable laws, including the Family Educational Rights and Privacy Act. To the extent permitted by such laws, the respondent, or if a minor, the student's parent, may review his/her disciplinary records, obtain a copy of such records upon payment of any lawful charges for duplication, and/or authorize disclosure of such records.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-080, filed 5/19/14, effective 6/19/14.]

## Initiation of Disciplinary Action

1. All disciplinary actions will be initiated by the student conduct officer. If that officer is the subject of a complaint initiated by the respondent, the president shall, upon request and when feasible, designate another person to fulfill any such disciplinary responsibilities relative to the complainant.
2. The student conduct officer shall initiate possible disciplinary action by serving the respondent with written notice directing him or her to attend a disciplinary meeting. The notice shall briefly describe the factual allegations, the specific apparent misconduct under WAC 495C-121-050, and the range of possible disciplinary sanctions, and specify the time and location of the meeting. At the meeting, the student conduct officer will present the allegations to the respondent and the respondent shall be afforded an opportunity to explain what took place. If the respondent fails to attend the meeting

after proper service of notice, the student conduct officer may impose disciplinary sanction(s) and conditions based upon the available information.

3. Within ten days of the scheduled initial disciplinary meeting, and after considering the information obtained by investigation and any information presented by the respondent, the student conduct officer shall serve the respondent with a written decision setting forth the facts and conclusions supporting his or her decision, the specific student conduct code provisions found to have been violated, the discipline imposed, if any, the consequences if a student fails to satisfy any disciplinary condition(s) which are being imposed, and a notice of the respondent's appeal rights, if any, with an explanation of the consequences of failing to file a timely appeal.
4. The student conduct officer may take any of the following actions:
  - a. Terminate the proceeding, with any appropriate exoneration of the respondent or counseling or advice to the respondent. The respondent cannot appeal a termination of the proceedings;
  - b. Specify misconduct under WAC 495C-121-050 which he/she finds to have occurred and impose disciplinary sanction and/or condition(s), as described in WAC 495C-121-060; or
  - c. Refer the matter directly to the student conduct committee for a hearing and imposition of such disciplinary sanction and/or condition(s) as the committee deems appropriate. Such referral shall be to the attention of the chair of the committee with a copy served on the respondent.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-100, filed 5/19/14, effective 6/19/14.]

## Appeals and Referrals—Routing

1. The respondent may appeal a disciplinary action by filing a written notice of appeal with the conduct review officer within twenty-one days of service of the student conduct officer's decision. Failure to file a timely notice of appeal constitutes a waiver of the right to appeal, and the student conduct officer's decision shall be deemed final.
2. The notice of appeal must include a brief statement explaining why the respondent is seeking review.

3. Except as provided in WAC 495C-121-230 or elsewhere in these rules, the parties to an appeal shall be the respondent and the student conduct officer.
4. On appeal, the student conduct officer bears the burden of establishing the factual elements of the alleged misconduct by a preponderance of the evidence, i.e., that it is more likely than not that the respondent engaged in the alleged misconduct.
5. Imposition of a disciplinary sanction and conditions shall be stayed during an appeal, except for a summary suspension that has been imposed under WAC 495C-121-190.
6. The student conduct committee shall hear:
  - a. Appeals from disciplinary suspensions in excess of ten instructional days, and any related disciplinary condition(s);
  - b. Appeals from dismissals, and any related disciplinary condition(s); and
  - c. Cases referred by the student conduct officer, the conduct review officer, or the president.
7. Appeals from the following disciplinary sanctions and related disciplinary conditions shall be reviewed through a brief adjudicative proceeding:
  - a. Written disciplinary reprimands, and any related disciplinary condition(s);
  - b. Disciplinary probation, and any related disciplinary condition(s); and
  - c. Disciplinary suspensions of ten instructional days or less, and any related disciplinary condition(s).
8. Except as provided elsewhere in these rules, disciplinary warnings and terminations of proceedings are final actions and are not subject to appeal.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-110, filed 5/19/14, effective 6/19/14.]

## Brief Adjudicative Proceedings— Initial Hearing and Decision

1. Brief adjudicative proceedings shall be conducted by a conduct review officer. The conduct review officer shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or

bias, or has previously provided significant advice or direction to the student conduct officer.

2. Before making a decision, the conduct review officer shall schedule an informal hearing to provide each party an opportunity (a) to be informed of the agency's view of the matter, and (b) to explain the party's view of the matter.
3. The conduct review officer shall serve an initial decision upon the parties within ten days of the scheduled hearing. The initial decision shall contain a brief written statement of the reasons for the decision and information about how to seek review under WAC 495C-121-130.
4. If the conduct review officer, upon review, determines that the respondent's conduct may warrant imposition of a disciplinary suspension of more than ten instructional days or a dismissal, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-120, filed 5/19/14, effective 6/19/14.]

## Brief Adjudicative Proceedings— Review of Initial Decision

1. A party may obtain review of an initial decision by the president, by filing a written request for review with the conduct review officer within twenty-one days of service of the initial decision. That officer shall promptly forward the request to the president. If no timely request for review is filed, the initial decision shall become the final decision.
2. The president shall not participate in any case in which he/she is a witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction.
3. During the review, the president shall give each party an opportunity to file a written statement explaining their view of the matter and shall make any inquiries to the parties which are necessary to ascertain whether the discipline should be modified or whether the proceedings should be referred to the student conduct committee for a hearing.
4. The president shall serve a written decision on review on all parties within twenty days of the later of the filing of the request for review or any deadline for parties' explanatory statements. A request for review



may be deemed to have been denied if the president does not serve a decision within those twenty days. The decision shall include a brief statement of its reasoning. The president's decision shall be the final college action in the matter, and shall include notice of any right to request reconsideration and of the right to seek judicial review under chapter 34.05 RCW.

5. If the president, upon review, determines that the respondent's conduct may warrant imposition of a dismissal or a disciplinary suspension of more than ten instructional days, he/she shall refer the matter to the student conduct committee for a disciplinary hearing.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-130, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee— Formation

1. Proceedings of the student conduct committee shall be governed by the Administrative Procedure Act, chapter 34.05 RCW, and by the Model Rules of Procedure, chapter 10-08 WAC. To the extent there is a conflict between this chapter and chapter 10-08 WAC, this chapter shall control.
2. The student conduct committee shall consist of five members:
  - a. Two full-time students appointed by the student government to terms of up to one academic year;
  - b. Two faculty members appointed by the president to terms of up to two academic years, beginning in alternating years;
  - c. One faculty member or administrator, other than an administrator serving as a student conduct or conduct review officer, appointed as chair by the president for a term of up to two academic years.

Members may be reappointed for subsequent terms. Any member may be replaced by the appointing authority for the remainder of the term for good cause shown.

3. The faculty member or administrator appointed as chair may take action on preliminary hearing matters prior to convening the committee. The chair shall receive annual training on protecting victims and promoting accountability in cases involving allegations of sexual misconduct.
4. A member of the student conduct committee shall not

participate in any case in which he/she is a party, complainant, or witness, has direct or personal interest, prejudice, or bias, or has previously provided significant advice or direction. Any party may petition for disqualification of a committee member pursuant to RCW 34.05.425(4).

5. Hearings may be heard by a quorum of three members of the committee, so long as one faculty member and one student are included on the hearing panel. Committee action may be taken upon a majority vote of all committee members attending the hearing.[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-140, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee— Prehearing Proceedings

1. The student conduct committee chair shall serve all parties with written notice of the hearing not less than seven days in advance of the hearing date, as further specified in RCW 34.05.434 and WAC 10-08-040 and 10-08-045. The chair may shorten this notice period if both parties agree, and also may continue the hearing to a later time for good cause shown.
2. The chair may conduct prehearing conferences and/or make prehearing decisions concerning the simplification of issues, the extent and form of any discovery, issuance of protective orders, and similar procedural matters.
3. Discovery will be available as determined by the chair and in accordance with RCW 34.05.446. Upon request, the chair shall provide reasonable assistance to a party in obtaining relevant and admissible evidence that is within the college's control.
4. The chair may provide to the committee members in advance of the hearing copies of (a) the conduct officer's notification of imposition of discipline or referral to the committee, and (b) the notice of appeal. If doing so, however, the chair should remind the members that these documents are not evidence of any facts they may allege.
5. Upon request filed at least five business days before the hearing by any party, or at the direction of the committee chair, the parties shall exchange, no later than the third business day prior to the hearing, lists of potential witnesses and copies of potential exhibits that they reasonably expect to present to the committee. Failure to participate in good faith in such

a requested exchange may be cause for exclusion from the hearing of any witness or exhibit not disclosed, absent a showing of good cause for such failure.

6. The parties may agree before the hearing to designate specific exhibits as admissible without objection and, if they do so, whether the chair may provide copies of these admissible exhibits to the committee members before the hearing.
7. Communications between a committee member and any other nonmember hearing participant regarding any issue in the proceeding, other than communications necessary to procedural aspects of maintaining an orderly process, are generally prohibited without notice and opportunity for all parties to participate. Any improper “ex parte” communication shall be placed on the record, as further provided in RCW 34.05.455.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-150, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee— Hearings

1. Upon the failure of any party to attend or participate in a hearing, the chair may either:
  - a. Proceed with the hearing; or
  - b. Serve a default order in accordance with RCW 34.05.440.
2. The committee will ordinarily be advised by an assistant attorney general.
3. Each party may be accompanied at the hearing by a nonattorney assistant of his/her choice. A party other than the student conduct officer may elect to be represented by an attorney at his or her own cost, but will be deemed to have waived that right unless, at least four business days before the hearing, written notice of the attorney’s identity and participation is filed with the chair, with a copy to the student conduct officer. If such a party is represented by an attorney, the student conduct officer may also be represented by a second, appropriately screened, assistant attorney general.
4. The chair shall preside at the hearing and decide procedural questions that arise during the hearing, except as overridden by majority vote of the

committee. Evidence shall be admitted or excluded in accordance with RCW 34.05.452. All testimony shall be given under oath or affirmation.

5. The hearing will ordinarily be closed to the public, in light of the Family Educational Rights and Privacy Act. However, if all parties agree on the record to open some or all of the proceedings, the chair shall determine any extent to which the hearing will be open. If any person disrupts the proceedings, the chair may exclude that person from the hearing room.
6. The chair shall afford opportunity to all parties to present their cases, and shall cause the hearing to be recorded by a method that he/she selects, in accordance with RCW 34.05.449. That recording, or a copy, shall be made available to any party upon request. Other recording shall also be permitted, in accordance with WAC 10-08-190.
7. The chair shall assure maintenance of the record of the proceeding which is required by RCW 34.05.476. This record shall be available upon request by any party for inspection and copying, except as limited by FERPA.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-160, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee—Initial Decision

1. At the conclusion of the hearing, the committee shall permit the parties to make closing arguments in whatever form it wishes to receive them. The committee also may permit each party to propose findings, conclusions, and/or a proposed decision for its consideration. Only evidence presented at the hearing will be considered by the committee.
2. Within twenty days following the later of the conclusion of the hearing or the committee’s receipt of closing arguments, the committee shall issue an initial decision in accordance with RCW 34.05.461 and WAC 10-08-210. The initial order shall include:
  - a. Findings on all material issues of fact and conclusions on all material issues of law, including which, if any, provisions of WAC 495C-121-050 were violated. Any findings based substantially on the credibility of evidence or the demeanor of witnesses shall be so identified.
  - b. A determination on appropriate disciplinary

sanction and/or disciplinary conditions, if any. The committee may affirm, reverse, modify, or supplement any disciplinary sanction and/or disciplinary condition(s) imposed by the student conduct officer.

- c. A statement that the initial order will become final unless a party seeks review of that decision in accordance with WAC 495C-121-180.
3. The chair shall cause copies of the initial decision to be served on the parties, including any legal counsel of record. The committee chair shall also promptly transmit the record of the committee's proceedings and a copy of its decision to the president.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-170, filed 5/19/14, effective 6/19/14.]

## Student Conduct Committee—Review of Initial Decision

1. A party who is aggrieved by the committee's initial decision may obtain review of that decision by filing a notice of appeal with the president within twenty-one days after it was served on that party. If no timely notice of appeal is filed, the initial decision shall become the final decision.
2. The notice of appeal must identify the specific findings of fact and/or conclusions of law in the initial decision that are challenged, and must contain an argument why the appeal should be granted.
3. The president may ask for additional argument from the parties on the issues raised in the notice of appeal. The president's review will ordinarily be limited to those issues, and shall be restricted to the committee hearing record. The president shall not engage in ex parte communication with any of the parties regarding the appeal.
4. The president shall serve a written decision on review on all parties within forty-five days after receipt of the notice of appeal. The decision shall include appropriate findings and conclusions. Unless it remands the case to the committee for further proceedings or gives a right to request reconsideration, the president's decision shall be the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070,

§ 495C-121-180, filed 5/19/14, effective 6/19/14.]

## Summary Suspension

1. Summary suspension is a temporary exclusion from specified college facilities and denial of access to all activities or privileges for which a respondent might otherwise be eligible, while an investigation, disciplinary procedures, and/or an appeal are pending.
2. The student conduct officer may impose a summary suspension if there is probable cause to believe, i.e., there are reasonable grounds for believing, that the respondent has committed misconduct under WAC 495C-121-050 and that either:
  - a. The situation involves an immediate danger to the public health, safety, or welfare which requires immediate college action; or
  - b. The student's behavior poses an ongoing threat of substantial disruption of, or interference with, the operations of the college.
3. A summary suspension shall be effective when the respondent receives written or oral notice of that suspension. If oral notice is given, a written notification must be served on the respondent within two business days of the oral notice. The written notification shall be entitled "Notice of Summary Suspension" and shall include:
  - a. The reasons for imposing the summary suspension, including a description of the misconduct and specification of the provisions of WAC 495C-121-050 allegedly violated;
  - b. The date, time, and location when the respondent must appear before the conduct review officer for a hearing on the summary suspension; and
  - c. The conditions, if any, under which the respondent may physically access college facilities or communicate with members of the college community. If the respondent is prohibited from entering college facilities, he/she may be given a notice against trespass which warns that his/her privilege to enter college facilities has been withdrawn, subject to any specified exceptions such as an invitation to meet with the student conduct officer or conduct review officer or to attend a scheduled disciplinary hearing, and that he/she shall be considered to be trespassing and subject to arrest for criminal

trespass for any violation.

4. The hearing before the conduct review officer shall be scheduled as soon as practicable after service of the notice of summary suspension. If the respondent fails to appear at the scheduled time, the conduct review officer may order that the summary suspension remain in place. During the summary suspension hearing, the issues shall be:
  - a. Whether the requirements under subsection (2) of this section are satisfied; and
  - b. Whether the summary suspension should be continued pending the conclusion of disciplinary proceedings and/or should be less restrictive in scope.
5. As soon as practicable following the hearing, the conduct review officer shall issue, and serve on the respondent and student conduct officer, a written decision which addresses the issues at the hearing. The conduct review officer shall also provide information about the decision, to the extent legally permissible under FERPA, to all persons and offices who may be bound or protected by it.
6. The respondent may request a de novo review of the summary suspension hearing decision by the student conduct committee. The review will be scheduled promptly. Either party may request the review to be consolidated with any other disciplinary proceeding arising from the same matter.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-190, filed 5/19/14, effective 6/19/14.]

## Supplemental Definitions

The following supplemental definitions apply in student disciplinary matters involving allegations of sexual misconduct by a student:

1. A “complainant” is an alleged victim of sexual misconduct.
2. “Sexual misconduct” has the meaning ascribed to this term in WAC 495C-121-050.
3. “Title IX compliance officer” is the college position designated by the president as having the primary direct responsibilities related to Title IX, 20 U.S.C. §§ 1681-88.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070,

§ 495C-121-200, filed 5/19/14, effective 6/19/14.]

## Supplemental Sexual Misconduct Procedures

In student discipline matters involving allegations of sexual misconduct by a student:

1. Both the respondent and the complainant shall be provided the same, or substantially equivalent, procedural rights to participate. For the complainant, this includes the rights to meet with the student conduct officer during the initial disciplinary process under WAC 495C-121-100 and to appeal as provided in WAC 495C-121-230.
2. These rules shall supplement the foregoing student disciplinary rules in WAC 495C-121-010 through 495C-121-190. In the event of conflict between these supplemental sexual misconduct rules and the foregoing rules, these supplemental rules shall prevail.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-210, filed 5/19/14, effective 6/19/14.]

## Supplemental Complaint Process

With respect to complaints or other reports of alleged sexual misconduct by a student:

1. The college’s Title IX compliance officer shall investigate, or assure investigation of, complaints or other reports of alleged sexual misconduct by a student. The investigation will be completed in a timely manner and the results of the investigation shall be referred to the student conduct officer for possible disciplinary action.
2. Informal dispute resolution shall not be used to resolve sexual misconduct complaints without written permission from both the complainant and the respondent. If the parties elect to mediate a dispute, either party shall be free to discontinue the mediation at any time. Mediation shall not be used to resolve complaints involving allegations of sexual violence.
3. College personnel will honor requests to keep sexual misconduct complaints confidential to the extent this can be done without unreasonably risking the health, safety, and welfare of the complainant or other members of the college community or compromising the college’s duty to investigate and process such complaints.

4. The student conduct officer, prior to serving a disciplinary decision under WAC 495C-121-100, will make a reasonable effort to contact the complainant to discuss the results of the investigation and possible disciplinary sanctions and/or disciplinary conditions that may be imposed.
5. The student conduct officer, on the same date that a disciplinary decision is served on the respondent under WAC 495C-121-100, will serve a written notice, in compliance with FERPA, informing the complainant whether the allegations of sexual misconduct were found to have merit and describing any disciplinary sanctions and/or conditions which are being imposed upon the respondent for the complainant's protection. The notice will also inform the complainant of her/his rights to appeal as stated in WAC 495C-121-230. If protective disciplinary sanctions and/or conditions are imposed, the student conduct officer shall also make a reasonable effort to have the notice served upon the complainant prior to service upon the respondent.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-220, filed 5/19/14, effective 6/19/14.]

## Supplemental Appeal Rights

In student discipline matters involving allegations of sexual misconduct by a student:

1. The following actions by the student conduct officer may be appealed by the complainant:
  - a. The dismissal of a sexual misconduct complaint; or
  - b. Any disciplinary sanction(s) and conditions imposed against a respondent for a sexual misconduct violation, including a disciplinary warning.
2. A complainant may appeal a disciplinary decision by filing a notice of appeal with the conduct review officer within twenty-one days of service of the notice of the discipline decision provided for in WAC 495C-121- 220(5). The notice of appeal may include a written statement setting forth the grounds of appeal. Failure to file a timely notice of appeal constitutes a waiver of this right and the disciplinary decision shall be deemed final.
3. If the respondent timely appeals a decision imposing discipline for a sexual misconduct violation, the

college shall notify the complainant of the appeal and provide the complainant an opportunity to intervene as a party to the appeal.

4. Except as otherwise specified in this supplemental procedure, a complainant who timely appeals a disciplinary decision or who intervenes as a party to the respondent's appeal of a disciplinary decision shall be afforded the same procedural rights as are afforded the respondent.
5. An appeal by a complainant from the following disciplinary actions involving allegations of sexual misconduct against a student shall be handled as a brief adjudicative proceeding:
  - a. Termination of the proceedings;
  - b. A disciplinary warning;
  - c. A written disciplinary reprimand;
  - d. Disciplinary probation;
  - e. Suspensions of ten instructional days or less; and/or
  - f. Any conditions or terms imposed in conjunction with one of the foregoing disciplinary actions.
6. An appeal by a complainant from disciplinary action imposing a suspension in excess of ten instructional days or an expulsion shall be reviewed by the student conduct committee.
7. In proceedings before the student conduct committee, respondent and complainant shall have the right to be accompanied by a nonattorney assistant of their choosing during the appeal process. Complainant may choose to be represented at the hearing by an attorney at his or her own expense, but will be deemed to have waived that right unless, at least four business days before the hearing, he or she files a written notice of the attorney's identity and participation with the committee chair, and with copies to the respondent and the student conduct officer.
8. The complainant and respondent shall not directly question or cross-examine one another in either brief adjudicative proceedings or proceedings before the committee. In proceedings before the committee, all questions shall be directed to the chair, who will act as an intermediary and pose questions on the party's behalf.

9. Student conduct hearings involving sexual misconduct allegations shall be closed to the public, unless respondent and complainant both waive this requirement in writing and request that the hearing be open to the public. Complainant, respondent and their respective nonattorney assistants and/or attorneys may attend portions of the hearing where argument, testimony, and/or evidence are presented to the student conduct committee.
10. On the same date as the initial decision is served on the respondent under WAC 495C-121-120 or 495C-121-170, the conduct review officer or committee chair, as appropriate, will serve complainant with a written notice consistent with FERPA which states whether the allegations of sexual misconduct were found in the initial decision to have merit and describing any disciplinary sanction(s) and/or disciplinary condition(s) imposed upon the respondent for the complainant's protection. The notice will also inform the complainant of his/her appeal rights.
11. Complainant, as a party, may appeal the initial decision to the president, under either WAC 495C-121-130, after a brief adjudicative proceeding, or WAC 495C-121-180, after a committee proceeding.
12. On the same date that the president serves his/her decision on review on the other parties, under WAC 495C-121-130 or 495C-121-180, he/she shall serve complainant either with that decision, if allowed under FERPA, or with a written notice consistent with FERPA which both states whether the allegations of sexual misconduct were found to have merit and describes any disciplinary sanction(s) and/or disciplinary condition(s) imposed upon the respondent for the complainant's protection. This notice shall communicate the final college action in the matter and shall include notice of the right to seek judicial review under chapter 34.05 RCW.

[Statutory Authority: RCW 28B.50.140. WSR 14-11-070, § 495C-121-230, filed 5/19/14, effective 6/19/14.]

# Academic Year Calendar

## HOURS OF OPERATION

In general, Clover Park offices are open Monday-Friday between the hours of 7:30 a.m. and 4:30 p.m. For exact hours of each office, please visit [www.cptc.edu/about/office-hours](http://www.cptc.edu/about/office-hours) (p. 342)

## ACADEMIC YEAR CALENDAR

CPTC makes every effort to ensure all items in the calendar are accurate at the time of publication. Dates are subject to change and can be verified at [www.cptc.edu/about/academic-calendar](http://www.cptc.edu/about/academic-calendar) (p. 342)

### June 2024

June 17 Summer tuition/fees due

### JULY 2024

July 1 Summer quarter begins  
July 2 Last day of open registration for summer quarter  
July 4 Independence Day (College Closed)  
July 8 Last day to drop with 100% refund  
  
July 8 Foundation scholarship applications open for fall quarter  
July 10 Program Information Sessions  
July 24 Program Information Sessions  
July 26 Graduation applications due summer quarter  
July 29 Last day to withdraw with 50% refund  
July 29 Foundation scholarship applications for fall close

### AUGUST 2024

August 2 Priority registration (Running Start, NWCHTS, Veterans, active duty and spouses, domestic partners and dependents) Fall quarter  
  
August 5-8 Continuing Student Registration Fall quarter  
August 7 Students earn 100% of Financial Aid funds  
  
August 9-October 1 Open Registration Fall Quarter  
August 7 Students have earned 100% of financial aid funds  
  
August 14 Program Information Session  
August 19 Last date to withdraw with 'W'

August 28 Program Information Sessions

August 30 Last day summer quarter

August 31-September 29 Summer Break

### SEPTEMBER 2024

September 2 Labor Day (College Closed)  
  
September 6 Quarterly grades due online  
September 16 Tuition/fees due fall quarter  
September 25 New Student Orientation  
September 26 Professional Service Day  
September 27 Opening Day  
September 30 Fall quarter begins  
September 30 Foundation scholarship applications open for winter quarter

### OCTOBER 2024

October 1 Last day open registration fall quarter  
October 4 Last day to drop with 100% refund  
October 9 Program Information Sessions  
October 18 Outcomes/Assessment Day (No classes)  
October 21 Faculty In-Service Day (no classes)  
  
October 21 Foundation scholarship application for winter close  
October 23 Program Expo  
October 25 Graduation application due date for fall quarter  
  
October 29 Last day to withdraw with 50% refund

### NOVEMBER 2024

November 1 Priority Registration (Running Start, NWCHTS, Veterans, active duty and spouses, domestic partners and dependents) Winter quarter  
November 4-7 Continuing Student Registration  
November 8 - January 7 Open registration  
November 11 Veterans Day (College closed)  
November 13 Program Information Sessions  
  
November 14 Students earn 100% of Financial Aid funds  
November 20 Last day to withdraw with 'W' Fall quarter  
November 28-29 Thanksgiving Break (College closed)

### DECEMBER 2024

December 11 Program Information Sessions  
December 13 Last day Fall quarter  
  
December 14-Jan 5 Winter Break

December 16 Professional Service Day  
 December 16 Winter quarter tuition/fees due  
 December 17 New Student Orientation  
 December 19 Quarterly grades due online  
 December 23-Jan 1 Winter Holiday (College Closed)

### **JANUARY 2025**

January 1 New Years Day (College Closed)  
 January 6 Winter quarter starts  
  
 January 6 Foundation scholarship applications open spring quarter  
 January 8 Program Information Sessions  
 January 10 Last day to drop with 100% refund  
 January 20 Martin Luther King, Jr. Day (College Closed)  
 January 22 Program Information Sessions  
  
 January 27 Foundation Scholarship applications for spring close  
 January 31 Graduation applications due winter quarter  
 January 31 Priority registration (Running Start, NWCTHS, Veterans, active duty and spouses, domestic partners and dependents) Spring quarter

### **FEBRUARY 2025**

February 3 Last day to withdraw with 50% refund  
  
 February 3-6 Continuing student registration  
 February 7-April 1 Open registration  
 February 12 Program Information Sessions  
 February 17 President's Day (College closed)  
  
 February 19 Students earn 100% of Financial Aid funds  
  
 February 26 Program Information sessions  
 February 25 Last day to withdraw with 'W'  
 February 28 Faculty/Staff In-Service Day (no classes)

### **MARCH 2025**

March 10 Tuition/fees due spring quarter  
 March 12 Program Information Sessions  
 March 19 Last day winter quarter  
 March 20 New Student Orientation  
 March 20-March 30 Spring break  
 March 20 New Student Orientation  
 March 25 Quarterly grades available online  
 March 31 Spring quarter start

### **APRIL 2025**

April 1 Last day of open registration spring quarter

April 4 Last day to drop with 100% refund  
 April 9 Program Information Sessions  
 April 23 Program Expo  
 April 25 Last day to withdraw with 50% refund spring quarter  
 April 25 Spring quarter graduation applications due

### **MAY 2025**

May 8 Career Conference  
 May 9 Priority Registration (Running Start, NWCTHS, Veterans, active duty and spouses, domestic partners and dependents) Summer/Fall quarters  
 May 12-15 Continuing Student Registration  
  
 May 13 Student earn 100% of Financial Aid funds  
  
 May 14 Program Information Session  
  
 May 16 Faculty In-Service (no classes)  
 May 16-July 2 Open registration Summer quarter  
 May 16-Sept 30 Open registration Fall 2025 quarter  
 May 19 Last day to withdraw with 'W' for spring quarter  
 May 26 Memorial Day (College Closed)  
 May 28 Program Information Session

### **JUNE 2025**

June 10 Last day Spring quarter  
 June 10 Commencement Ceremony (tentative)  
 June 11 Professional Services Day  
  
 June 11-June 30 spring break  
 June 16 Quarterly grades due online  
 June 17 New Student Orientation  
 June 19 Juneteenth (College closed)  
 June 17 Tuition/fees due summer quarter 2025



# Full-Time Faculty & Administration

## **ADRIEN, JENN**

*Executive Director of Marketing & Communications*  
Executive Development Program, University of Washington  
M.Ed, University of Puget Sound  
BA, French; Teaching, Central Washington University

## **AL TAMEEMI, RASHA**

*Architectural Engineering Design Instructor*  
Doctorate, University of Cincinnati  
MS, University of Technology  
Certificate in Urban Planning  
Certificate in Historic Preservation

## **ALEXANDER, DION**

*Mathematics Instructor*  
MA, Western Governor's University  
BA, Evergreen State College

## **AUTRY, TRISHA**

*Pharmacy Technician Instructor*  
Licensed Pharmacy Technician

## **BAKER, NATHAN**

*Manufacturing Technologies Instructor*  
AA, Clover Park Technical College

## **BARRE, MICHELLE**

*Director of Workforce Development*  
BS, University of Phoenix

## **BARTON, RICHARD**

*HVAC Instructor*  
AAT, Clover Park Technical College  
EPA Universal Certification  
06A Electrical Training

## **BAZAN, JOSE**

*Welding Instructor*  
AA, Clover Park Technical College

## **BEACH, LISA**

*Executive Director of Operations*  
BA, Washington State University

## **BOATWRIGHT, JASON**

*Dean of Instruction*

MS, University of Washington  
BA, Washington State University

## **BOON, CELVA**

*Director of Student Aid & Scholarships*  
BA, Evergreen State College

## **BRAY, KHAIRO**

*Faculty Counselor*  
MA, East Tennessee State University  
BS, Austin Beay State University

## **BROWN, DAVE**

*Automotive Technology Instructor*  
AAT, Automotive Technician, Clover Park Technical College  
ASE Certified Master Automobile Technician Automotive Technician, Denver Automotive and Diesel College  
WA State Journey Level Machinist / Jig & Fixture Toolmaker, the Boeing Company

## **BROXSON, THOMAS**

*Vice President for Instruction*  
EdD, Oregon State University  
MA, California State University Fullerton  
BA, California State University Fullerton

## **BURKES, LESTER**

*Dean of Instruction*  
MA, University of Washington  
BA, University of Washington  
BA, University of Washington  
AA, Pierce College

## **BUSHNELL, POPPY**

*Architectural Engineering Instructor*  
BA, University of Puget Sound  
AAT, Clover Park Technical College

## **CHASE-DEITRICH, DEBI**

*Early Care & Education Instructor*  
MA, Chapman University  
BS, Southern Illinois University

## **CHIARO, LOREE**

*Cosmetology Instructor*  
Licensed WA State Cosmetology Instructor/ Operator

## **CLARK, KEZIA**

*Surgical Technology Instructor*  
AAS, Spokane Community College

## **COLOMBINI-HYKE, LISA**

*Early Care and Education Instructor*  
ME, Lesley College  
BA, Gonzaga University

**COOKE, SUZANNE***Accounting Instructor*

BA, Texas A&amp;M University

AAS-T, Clover Park Technical College

**COOPER, DUSTIN***Avionics Instructor*

AAS, College of the Air Force

AMT, Community College of the Air Force

**COPELAND, KRISTIN***Dean of Library and Learning Innovation*

MA, Liberty University

BS, Pensacola Christian College

**CROUCHET, CRISTEEN***Dean of Student Success*

MPA, Anna Maria College

BA, University of Washington Tacoma

**DADASHOVA, IRADA***Nursing Instructor*

BSN, University of Washington

Registered Nurse

**DANA, SAMANTHA***Associate Vice President for Institutional Effectiveness*

MS, Johns Hopkins University

BA, University of Massachusetts

**DELEON, CARINE***Cosmetology Instructor*

WA State Licensed Instructor/Operator, Cosmetologist

**DEMPSEY, JESSICA***Director of College in the High School*

MA, Eastern Washington University

BA, Eastern Washington University

AA, Spokane Falls Community College

**DESURE, PEARL***Faculty Librarian*

MLS, University of Hawaii

**DOYON, GREG***Aviation Maintenance Technician Instructor*

Airframe &amp; Powerplant Mechanic Certification

Inspection Authorization-Aircraft Certification

Federal Aviation Administration

ASE Master Technician Certification

ASE L1 Advanced Engine Diagnosis Certification

Aviation Maintenance, Airframe Powerplant License

**EILERS, NICHOLAS***Automotive Instructor*

Automotive Tech Certificate, Clover Park Technical College

Automotive Collision Certificate, Clover Park Technical College

Wheeled Vehicle Repair Certificate, Ordnance Mechanical Maintenance School

A.S.E Master Certificate

**FAHERTY, DIONNA***English Instructor*

MA, Oregon State University

BA, Seattle University

**FATE, DOUG***Assistant Chief Pilot*

BS, University of North Dakota

Commercial Pilot Certificate

Certified Flight Instructor

**FAUST, DEREK***Environmental Sciences & Technology Instructor*

PhD, Mississippi State University

MS, Texas Tech University

BS, Elizabethtown College

**FEIST, SHANNON***Chief Pilot*

Flight Instructor License

Commercial Pilot License

**FELCH, CHRISTOPHER***Digital Media & Design Instructor*

MA, Full Sail University

**FELCH, LINDA***Early Care & Education Instructor*

MEd, Lesley University

BA University of Puget Sound

AA, Spokane Falls Community College

**FERMIN, RENEE***Esthetic Sciences Instructor*

AA, Clover Park Technical College

Licensed Esthetics &amp; Cosmetology Instructor

**FOARDE, SAMUEL***Nursing Program Instructor*

MSN, Western Governors University

BSN, University of Central Florida

**FLANIGAN, CARY***Welding Instructor*

Certified Welder

**FOLLET, DIANE**

*English Language Acquisition Instructor*  
MEd in TESOL, Seattle University  
BA, The Evergreen State College

**FREDERICK, SANDY**

*Cosmetology Instructor*  
Licensed WA State Cosmetology Instructor/ Operator

**FREEMAN, KURT**

*Automotive Collision Technician Instructor*  
ASE Certification—Nonstructural Analysis and Damage Repair  
Structural Analysis and Damage Repair  
Automotive Structural Repair Certificate  
Shark Electronic Measuring System Certificate  
Mobile Air Conditioning Society Worldwide Certificate  
Journey Level

**GANGSTAD, AMY**

*Director of Budget*  
BS, Central Washington University

**GARDNER, TRACEY**

*Medical Laboratory Technician Instructor*  
MS, Rosalind Franklin University of Medicine & Science  
BS, Washington State University

**GEARY, SHAWN**

*Digital Media & Design Instructor*  
BA, University of Advancing Technologies

**GILMORE, MICHAEL**

*Non-Destructive Testing Instructor*  
BA, Brandman University  
AAT, Central Texas College  
Certified Level 2 Ultrasonic Technician

**GORDON, EARL**

*Electrician Low Voltage Fire/Security Instructor*  
Licensed Journeyman  
Electrician Low Voltage Certification

**GRAYSON, AMELIA**

*Vice President of Finance & Administration*  
BS, University of Phoenix  
MBA, University of Phoenix

**GREER, HANA**

*Nursing Instructor*  
MA, University of Washington  
BA, University of Washington

AA, Pierce College

LPN Certificate, Clover Park Technical College  
RN Certificate

**GRIFFIN, CHRISTAIN**

*Central Services Instructor*  
BA, University of Washington  
Registered Central Services Technician

**GUTTROMSON, CURTIS**

*Aviation Maintenance Instructor*  
AAT, Fort Steilacoom Community College  
Airframe and Power Plant License  
Inspection Authorization

**HAGGERTY, REBECCA**

*Histology Instructor*  
AA, Shoreline Community College  
ASCP Certified Histology Technician

**HALE, EVAN**

*Manufacturing Technologies Instructor*  
BA, The Evergreen State College  
AAT, Clover Park Technical College  
AAS, Pierce College

**HAUZINGER, IRENE**

*Director of Advising & Counseling*  
PhD, California Institute of Integral Studies  
MA, State University of New York at Binghamton  
BA, State University of New York at Binghamton  
AS, Jamestown Community College

**HERNANDEZ, KANDY**

*Nursing Instructor*  
BSN, University of Phoenix  
ASN, Bellevue Community College  
WA State RN License Registered Nurse

**HILLESLAND, MICHELLE**

*Dean of Instruction*  
MS, Western Governors University  
BA, University of Puget Sound  
Licensed WA State Massage Practitioner

**HOLLOWELL, KELLY**

*Network Operations & Systems Security Instructor*  
Certified Microsoft Pre-installation Specialist for:  
Windows XP, 2000, 2000 Server, 9x, Millennium (Me),  
and Office XP  
CompTIA A+, Net+, Linux+ Certificate Microprocessors  
and Controllers Certificate Microsoft (70-210) Win2k Pro  
(MCP), (70-215) Win2k S

**HUDSON, EARNEST***HVAC Instructor*

BA, Southern New Hampshire University  
 MA, Southern New Hampshire University

**IRISH, TRACY***Electrician Low-Voltage Instructor*

Licensed Electrician  
 Electrician Low Voltage Certification

**JETER, PAMELA***Executive Director of Information Technology*

BS, Capella University  
 Certified Education Technology Leader

**JONES, MICHELE***Medical Assistant Instructor*

BA, University of Washington,  
 AAS, Tacoma Community College  
 Medical Assistant Certificate, Clover Park Technical  
 College  
 Certified Medical Assistant

**JOY, EARL***Aviation Maintenance Technician Instructor*

BS, Thomas Edison State University  
 Private Pilot's License  
 Airframe & Powerplant Mechanic Certification  
 Master Logistician  
 Lean Six Sigma – Black Belt

**KELLY, DEAN***Vice President of Student Success*

MPA, University of Washington  
 BA, Pacific Lutheran University

**KILDUN, KEVIN***Running Start Counselor*

MEd, City University Tacoma  
 BA, Western Washington University

**KORSCHINOWSKI, CLAIRE***Dean of Instruction*

EdD, Brandman University  
 MEd, Western Washington University  
 BA, University of Washington

**LANDER, EVERICK***Automotive Technician Instructor*

ASE Certification

**LANPHIER, JAY***Network Operations & Systems Security Instructor*

AAT, Clover Park Technical College  
 CompTIA Certified Security

CompTIA Certified Server  
 CompTIA Certified Network  
 CompTIA Certified A+

**LOVEDAY, JOYCE***President*

PhD, Oregon State University  
 MBA, Idaho State University  
 BA, Wheaton College

**LEE, J.***English & Communications Instructor*

PhD, Illinois State University  
 MAT, Kent State University  
 BA, Kent State University

**LEWIS, ANGEL***Director of Child Development Services*

MA, Capella University  
 BA, Crown College  
 AA, Crown College

**CHRISTENSEN, SALLY***Early Childhood Education Instructor*

MA, Portland State University

**MAGUIRE, PATRICIA***Cosmetology Instructor*

WA State Licensed Barber, Cosmetologist, Esthetician &  
 Master Esthetician

**MAHONEY, CHRIS CHEN***Dean of Instruction*

EdD, Argosy University  
 MDes, Illinois Institute of Technology  
 BE, Tongji University

**MANN, TARLOCHAN***Operations Management Instructor*

MS, UOP - Renton Campus  
 BS, California State University  
 AS, California Community College

**MARTINEZ, DEYSI***Director of Outreach & Entry Services*

BA, University of Washington  
 AA, Tacoma Community College

**MASSEY, DEAN***Culinary Arts Instructor*

Pierce County Food Service Management License  
 Food Service Specialist Certification

Advanced Food Service Specialist Certification

**MAVOR, MICHAEL**

*Mechatronics Instructor*

AAT Mechatronics, Clover Park Technical College

**MCGOVERN, TAYLOR**

*Counselor*

MA, Faith Seminary

BA, Pacific Lutheran University

**MEERDINK, KEN**

*Computer Programming Instructor*

PhD, University of Idaho

MS, Seattle University

MS, University of Iowa

BS, University of Iowa

**MOLLAS, TULA**

*Mathematics/English Instructor*

BS, Southern Illinois University

AA, South Puget Sound Community College

**MONTGOMERY-MANDLEY, LARITA**

*Core Allied Health Instructor*

EdD, Nova Southeastern University

MEd, City University

BA, The Evergreen State College

**MORRIS, CATHERINE**

*Network Operations & Systems Security Instructor*

AAS-T, Clover Park Technical College

**MOWRY, CINDY**

*Associate Dean of Student Success*

MA, Seattle University

BA, University of Washington Tacoma

**MOYER, JOHN**

*Graphic Technologies Instructor*

Graphic Arts Program, Washington Technical Institute

**MULLINS, MICHAEL**

*Automotive Collision & Restoration Instructor*

ASE Collision Repair Estimator

ASE Painting and Refinishing

**NEBLETT, JAMES**

*Associate Vice President of Human Resources & Culture*

DBA, Argosy University

MA, University of Phoenix

BS, Purdue University

**NEWMAN, SHELLEY**

*Pastry Arts Instructor*

B&P, California Culinary Academy

AA, Highline Community College

ServSafe Certification

Class 12 Mixologist

**NOFFKE, WENDY**

*Biology Instructor*

DC, Life Chiropractic College

BS, University of Washington

AA, Highline Community College

**OHARA, TIMOTHY**

*HVAC Instructor*

HVAC/R Certificate, Clover Park Technical College

EPA Certified

**ORTIZ, JOSEPH**

*Computer Programming Instructor*

BS, Western Governor's University

**ROSE, TRACY**

*Social Services Instructor*

MS, Eastern Michigan University

BA, Vanderbilt University

Licensed WA State Registered Counselor

**PEREZ, JOYLENE**

*Health Unit Coordinator Instructor*

Health Unit Coordinator Certification

**PHILLIPS, HALEIGH**

*College Success Instructor*

MA, CA Polytechnic State University

BA, CA State University, Sacramento

**POLLOCK, JENNA**

*Dean of Instruction for Pre-College Pathways*

MA, BA, University of Illinois

**PRECOUR, HANNAH**

*Dental Assistant Instructor*

BS, Western Governors University

AAT, Clover Park Technical College

Certified Dental Assistant

**PURCELLA, CATHY**

*Executive Director of CPTC Foundation*

BA, Washington State University

**RANDALL, JODY**

*Network Operations & Systems Security Instructor*

AAT PC/LAN Support Technician

Microprocessor and Controller Technician, A+, Network

+, Certified Novell Netware 5 Administrator, &

BrainBench Linux + Certification

**RIOJAS, AMELIA**

*Welding Instructor*  
ATA, Olympic College  
Welding Certification

**ROSE, JAYA**

*Interior Design Instructor*  
MS, University of California, Los Angeles

**SANDOVAL, LORETA**

*Mathematics Instructor*  
MA, Colorado State University  
BS, Saint Louis University

**SAUCEDO, CHRISTOPHER**

*Construction Technology Instructor*  
AA, Clover Park Technical College

**SAWATZKI, JASON**

*Mechatronics Instructor*  
BA, Cornell College

**SCHMELING, LAVERTA**

*Mathematics Instructor*  
MEd, University of Washington-Tacoma  
BA, Portland State University  
Professional Diploma, University of Hawaii  
American Ethnic & Gender Studies Certificate, Tacoma  
Community College

**SHA, GAOFENG**

*Non-Destructive Testing Instructor*  
PhD, Ohio State University  
MS, University of the Chinese Academy of Sciences  
BS, Hohai University

**SIEDLICKI, MELISSA**

*Esthetic Sciences Instructor*  
Cidesco International Certification and License  
Institute for Advanced Clinical Esthetics  
Cosmetic Chemistry Certification UCLA  
Master Esthetician, Esthetician, Cosmetologist, Nail  
Technician Licenses

**SMITH, KATHRYN**

*Environmental Sciences & Technology Instructor*  
MES, The Evergreen State College  
BA, Washington State University

**SMITH-FROMM, TIFFANY**

*Dean of Instruction*  
MA, University of Washington  
BS, University of Washington  
AA, University of Washington

**SOLBRACK, ANNEMARIE**

*Counselor*  
MEd, Seattle University  
BA, Seattle Pacific University

**SONGAO, TRACEY**

*Registrar*  
MS, Western Governors University

**SORENSEN, KARLEE**

*Esthetics Instructor*  
Licensed Esthetician

**SOUZA, DON**

*Network Operations & Systems Security Instructor*  
AA, Community College of the Air Force Microsoft  
Certification, MCP  
CompTIA Certified A+  
BrainBench Certifications Network Technician

**STEWART, ELIZABETH**

*Adult Basic Education Instructor*  
MA, Eastern Washington University  
BAE, Eastern Washington University

**STOKES, ERIC**

*General Education Instructor*  
MA, University of Washington  
BA, Troy University

**SWEERUS, NEIL**

*Mathematics Instructor*  
PhD, Northeastern University  
MS, University of Massachusetts  
MS, Brown University  
BA, ME, Stevens Institute of Technology  
AAS, Computer Programming  
AAS, Web Development  
AAS, Anthropology  
Certificate in American Ethnicity & Gender Diversity

**TURNER, JEFFREY**

*Network Operations & Systems Security Instructor*  
MA, Webster University  
BA, Clarkson University  
AAT, Clover Park Technical College

**URQUIDEZ, JAMIE**

*Surgical Technology Instructor*  
AAS, Clover Park Technical College  
Certified Surgical Technologist

**VALENCIA, IESHA**

*Associate Vice President for Equity, Diversity, and*

*Inclusion*

M.Ed, The University of Vermont  
BA, Child Development

**VAN BEEK, CAROLYN**

*Licensed Mental Health Counselor*  
MA, Chapman University  
BS, Central Washington University

**WALKER, MIKE**

*Aviation Maintenance Instructor*  
BA, South Seattle College  
AAS, South Seattle College

**WALLACK, JESSICA**

*Director for Student Life*  
MA, University of New York, Oswego  
BA, Ball State University

**WATTS, BRYANT**

*Human Services/Chemical Dependency Instructor*  
MSW, University of Southern California  
BASW, University of Washington Tacoma  
CCIS-II

**WATTS, JULIE**

*Interior Design Instructor*  
BME, Pacific Lutheran University  
AAS, Pierce College  
AAS, Clover Park Technical College

**WENNGREN, CARL**

*Mechatronics Instructor*  
MS, Chalmers University of Technology  
BA, Chalmers University of Technology

**WHEELER, MIKE**

*Psychology Instructor*  
MS, Pacific Lutheran University  
BS, Washington State University  
Licensed WA State Mental Health Counselor

**WHIPPLE, JENNIFER**

*Esthetics Instructor*  
Licensed Esthetician

**WIRTH, ROBERTA**

*Dental Assistant Instructor*  
MA, Liberty University BS, Liberty University  
Certified Dental Assistant, CPTC Vocational Certificate

**WOODLAND, KATHERINE**

*Practical Nursing, LPN, and RN Bridge Instructor*  
MSN, Western Governors University  
BSN, Western Governors University

Nursing ATA, Olympic College  
Certified Nursing Assistant – Olympic College  
BS, Brigham Young University  
AAS, Olympic College

**WOODRUFF, GREGORY**

*Aviation Maintenance Instructor*  
Airframe & Powerplant Certification  
Inspection Authorization





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