SNOHOMISH SCHOOL DISTRICT

CAREER & TECHNICAL EDUCATION PROGRAMS

2019-2020
# Table of Contents

04

WHAT IS CAREER & TECHNICAL EDUCATION?

05

24 CREDIT CAREER & COLLEGE READY GRADUATION REQUIREMENTS

06

CTE COURSE EQUIVALENCIES

07

WHAT WILL I DO AFTER HIGH SCHOOL?

08

HOW WILL I GET THERE?

09

LEADERSHIP, CERTIFICATIONS, & PARTNERSHIPS

10

AGRICULTURE & SCIENCE
Cover Photo by Joel Chonzema, Snohomish High School Photography Student

* The college credit information in this catalog is subject to change based on community college approval and availability on a yearly basis. Credit must be applied for and granted the year the high school course is completed. There are no retroactive credit options available. Fees can vary by college, please check with the instructor for more information.

* Career information- ONET and Apprenticeship.Gov Informational  Accessed 12/20/18
Hands-on learning, real-life skills and career exploration. Career and Technical Education (CTE - formerly referred to as vocational education) prepares students for life and a career after high school. Apprenticeships, technical schools, community colleges, military or four-year universities are options that can be explored in our courses. Science, technology, engineering, and mathematics (STEM) concepts are taught in many of our CTE courses and include a blend of academic, technical and trade skills. Many CTE courses offer college credit through CTE Dual Credit (SERS) programs, College in the High School or advanced placement courses.
17 CORE CREDITS

3 PPR CREDITS

4 ELECTIVE CREDITS

**PERSONAL PATHWAY REQUIREMENT:**

Three courses that lead to a specific post-high school career outcome chosen by the student, based on the student’s interest and High School & Beyond Plan.

**What classes match your plan and what careers are you interested in?**

Can you change your career interests and High School Beyond Plan? **YES!**

**ELECTIVE CREDITS:**

Exploratory classes of interest.

17 + 3 + 4 = **24**
CTE COURSE EQUIVALENCIES – TWO FOR ONE

HOW DOES IT WORK?
For example, taking Advanced CADD (yearlong) earns one credit toward the 24 required for graduation and fulfills two graduation requirements.

- Creates flexibility to choose more elective courses
- Can address other graduation requirements

STUDENTS:
Check with your high school counselor or college admission offices to make sure the course will be accepted for admission purposes. NCAA Requirements: Potential D1 or D2 athletes should check with their counselors annually regarding which Snohomish School District equivalency credits have been approved by the NCAA.

The current rule change to WAC 180-51-067 allows school districts to grant equivalency credit for courses offered in high schools.

Students who take a CTE-equivalency course may satisfy two graduation requirements while earning 1.0 credit for a yearlong course or 0.5 credit for a semester course; hence the “two for one”.

For a list of current approved course equivalencies please visit the CTE section of the Snohomish School District website at www.sno.wednet.edu/cte

CTE equivalencies are noted in the CTE program sections in this handbook.
WHAT WILL I DO AFTER HIGH SCHOOL?

APPRENTICESHIP EXAMPLES
AJAC-Aerospace Joint Apprenticeship Committee
APPRENTI- Technology Careers Apprenticeship
Northwest Carpenters Institute of Washington
PUD Apprenticeship
Puget Sound Electrical JATC

TWO-YEAR COMMUNITY COLLEGE EXAMPLES
Everett Community College
Edmonds Community College
Shoreline Community College
Bellevue College

FOUR-YEAR UNIVERSITY EXAMPLES
Central Washington University
Eastern Washington University
University of Washington
Washington State University
Western Washington University

APPRENTICESHIP/ ON THE JOB TRAINING

TWO-YEAR COMMUNITY COLLEGE

FOUR-YEAR UNIVERSITY

ONE- OR TWO-YEAR TECHNICAL COLLEGE

MILITARY TRAINING & RESOURCES

ONE/TWO-YEAR TECHNICAL COLLEGE EXAMPLES
Lake Washington Institute of Technology
DigiPen
Bellingham Technical College
Renton Technical College

MILITARY TRAINING & RESOURCES
U.S. Air Force
U.S. Army
U.S. Coast Guard
U.S. Marines
U.S. Navy
HOW WILL I GET THERE?

The Snohomish School District offers seven different CTE programs that are organized by career Pathways. Pathways provide students with a suggested sequence of courses that can lead to college credit and/or industry certification.

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE &amp; SCIENCE</td>
<td>Animal Biology, Plant Biology, Advanced Animal Biology, Advanced Plant Biology, Floral Design, Agroecology and Sustainability, Farm to Market</td>
</tr>
<tr>
<td>DESIGN &amp; MANUFACTURING</td>
<td>Pre-Engineering Courses- CADD Fundamentals, Advanced CADD I and II, Shop Technologies, Manufacturing Technologies, Fabrication Lab</td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY</td>
<td>Technology Exploration, Web Design, Advanced Web Design, Introduction to Computer Science, AP Computer Science A</td>
</tr>
</tbody>
</table>
LEADERSHIP, CERTIFICATION & PARTNERSHIPS

Each CTE program area offers students the opportunity to participate in Student leadership organizations. These provide learning opportunities outside the classroom including field trips, competition events, volunteer opportunities and industry connections. Many CTE courses also offer industry recognized certificates that can be used for resumes, job and college application.

WANT A JOB NOW? CHECK OUT YOUTH WORKS SNOCOYOUTHWORKS.ORG/
AGRICULTURE & SCIENCE

<table>
<thead>
<tr>
<th>PATHWAY COURSES</th>
<th>Grade</th>
<th>Length</th>
<th>Equivalency/ Requirement Met</th>
<th>College Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Biology</td>
<td>9-12</td>
<td>1 Year</td>
<td>Biology</td>
<td></td>
</tr>
<tr>
<td>Plant Biology</td>
<td>9-12</td>
<td>1 Year</td>
<td>Biology</td>
<td>Yes</td>
</tr>
<tr>
<td>(only offered at Snohomish High School)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floral Design</td>
<td>9-12</td>
<td>1 Semester</td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>(only offered at Snohomish High School)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Animal Biology</td>
<td>10-12</td>
<td>1 Year</td>
<td>Science</td>
<td></td>
</tr>
<tr>
<td>Advanced Plant Biology</td>
<td>10-12</td>
<td>1 Year</td>
<td>Science</td>
<td></td>
</tr>
<tr>
<td>(only offered at Snohomish High School)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm to Market</td>
<td>10-12</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agroecology &amp; Sustainability</td>
<td>11-12</td>
<td>1 Year</td>
<td>Science</td>
<td></td>
</tr>
</tbody>
</table>
### Veterinary Assistant - Pilchuck Veterinary Hospital

**Name**  
Maddi VanAssche

**Pathway**  
Agriculture & Science

**Age**  
18

**Education**  
Snohomish High School  
Central Washington University

---

**“The Snohomish agriculture program gave me the skills and experience to approach every opportunity I face with confidence and excitement.”**

---

<table>
<thead>
<tr>
<th>Apprenticeships</th>
<th>Veterinary Assistant</th>
<th>Tree Trimmer</th>
<th>Groomer</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Name</td>
<td>International Society of Arboriculture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Two-Year Degrees</th>
<th>Veterinary Technician</th>
<th>Landscaping &amp; Groundskeeping</th>
<th>Forest Technician</th>
</tr>
</thead>
</table>
| School Name      | Clover Park Technical College  
Edmonds Community College  
Skagit Valley College |

<table>
<thead>
<tr>
<th>Four-Year Degrees</th>
<th>Veterinarian (Doctoral Degree)</th>
<th>Wildlife Biologist</th>
<th>Natural Sciences Managers</th>
</tr>
</thead>
</table>
| School Name       | Washington State University  
Central Washington University  
University of Washington  
Central Washington University  
University of Washington |

---
# BUSINESS & MARKETING

## PATHWAY COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADE</th>
<th>LENGTH</th>
<th>EQUIVALENCY/REQUIREMENT MET</th>
<th>COLLEGE CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Exploration</td>
<td>9</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to Business Management</td>
<td>9-12</td>
<td>1 Semester</td>
<td></td>
<td>Yes (only at Snohomish High School)</td>
</tr>
<tr>
<td>Intro to Marketing</td>
<td>9-12</td>
<td>1 Year</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Law and Business Ethics</td>
<td>9-12</td>
<td>1 Semester</td>
<td>Senior English</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumer Law</td>
<td>9-12</td>
<td>1 Semester</td>
<td>Senior English</td>
<td></td>
</tr>
<tr>
<td>Business Math</td>
<td>10-12</td>
<td>1 Year</td>
<td>3rd Year Math</td>
<td>Yes</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>10-12</td>
<td>1 Semester</td>
<td>3rd Year Math</td>
<td>Yes</td>
</tr>
<tr>
<td>Adv. Business Management FBLA</td>
<td>10-12</td>
<td>1 Year</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>AP Economics</td>
<td>10-12</td>
<td>1 Year</td>
<td>Social Studies</td>
<td>Yes</td>
</tr>
<tr>
<td>Adv. Marketing/Sports Entertainment *Alternates Years</td>
<td>10-12</td>
<td>1 Year</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Entrepreneurship DECA</td>
<td>12</td>
<td>1 Year</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

**CTE PATHWAYS 2019 - 12**
SALES EXECUTION REPRESENTATIVE
WHIRLPOOL CORPORATION

Name
Evan Leonard

PATHWAY
Business & Marketing

AGE
20

EDUCATION
Snohomish High School
Grand Canyon University-Phoenix

PROGRAM NAME
ApprentiCareers.org

SCHOOL NAME
Edmonds Community College
Everett Community College
Tacoma Community College

TWO-YEAR DEGREES

JOBS
- Network Security Administrator
- IT Business Analyst
- Web Developer

FOUR-YEAR DEGREES

SCHOOL NAME
Central Washington University
Washington State University
Eastern Washington University

JOBS
- Accountant
- Marketing Manager
- Financial Analysts

JOBS
- Customer Service Rep
- Sales Representative
- Paralegal

“I took DECA all four years of high School. All the content, the competitions, the people- they were all the most realistic experience. Everything we did and practiced pertained to what I wanted to do in my life.”
### Design & Manufacturing

**Pre-Engineering**

#### Pathway Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Equivalency/Requirement Met</th>
<th>College Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Middle School</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Science I (STEM SHOP)</td>
<td>7</td>
<td>Sem CMS Q-VVMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Science II (STEM SHOP)</td>
<td>8</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Aided Drafting (only offered at Centennial Middle School)</td>
<td>8</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High School</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD Fundamentals</td>
<td>9-12</td>
<td>1 Semester</td>
<td>Art or 3rd Year Math</td>
<td>Yes</td>
</tr>
<tr>
<td>Shop Technologies</td>
<td>9-12</td>
<td>1 Semester</td>
<td>Art or 3rd Year Math</td>
<td>*</td>
</tr>
<tr>
<td>Advanced CADD I</td>
<td>9-12</td>
<td>1 Year</td>
<td>Art or 3rd Year Math</td>
<td>Yes</td>
</tr>
<tr>
<td>Advanced CADD II</td>
<td>10-12</td>
<td>1 Year</td>
<td>Art or 3rd Year Math</td>
<td>Yes</td>
</tr>
<tr>
<td>Manufacturing Technologies</td>
<td>10-12</td>
<td>1 Year</td>
<td>0.5 Science</td>
<td>*</td>
</tr>
<tr>
<td>Fabrication Lab (Fab Lab)</td>
<td>10-12</td>
<td>1 Year</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

* All students in this pathway can apply for the AJAC Youth Apprenticeship
“I love what I do and it brings me joy every day that I am working on a product that connects people all around the world. In my opinion, STEM is the future of the world, so being able to take high-level CTE classes at such a young age allowed me to compete with current adults around the world in jobs.”

NAME
Nate Walchenbach

PATHWAY
Design & Manufacturing

AGE
19

EDUCATION
Glacier Peak High School

EVCC Mechatronics

APPRENTICESHIPS

SCHOOL NAME
AJAC Aerospace Joint Appr.

CERTIFICATES/COURSES

SCHOOL NAME
Everett Community College
Renton Technical College
North Seattle Community College

TWO-YEAR DEGREES

SCHOOL NAME

Everett Community College
Renton Technical College
North Seattle Community College

FOUR-YEAR DEGREES

SCHOOL NAME

University of Washington
Washington State University
Western Washington University

JOBS

• Machinist
• Tool and Die Maker
• Industrial Maintenance Technician

JOBS

• Electro-Mechanical Technician
• CNC Tool Programmer
• Technical Designer

JOBS

• Aerospace Engineer
• Industrial Engineer
• Civil Engineer
### MIDDLE SCHOOL

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Equivalency/ Requirement Met</th>
<th>College Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family &amp; Consumer Science Education I</td>
<td>7</td>
<td>Sem CMS Q-VVMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family &amp; Consumer Science Education II</td>
<td>8</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen Academy (only offered at Centennial Middle School)</td>
<td>8</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HIGH SCHOOL

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Length</th>
<th>Equivalency/ Requirement Met</th>
<th>College Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culinary Essentials I</td>
<td>9-12</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>9-12</td>
<td>1 Semester</td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>Clothing &amp; Fashion Design (only offered at Glacier Peak High School)</td>
<td>9-12</td>
<td>1 Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development</td>
<td>9-12</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culinary Essentials II *Culinary Essentials I Pre Req</td>
<td>*9-12</td>
<td>1 Semester</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>International Cuisine *Culinary Essentials I Pre Req</td>
<td>*9-12</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adv. Clothing &amp; Fashion Design (only offered at Glacier Peak High School)</td>
<td>10-12</td>
<td>1 Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education (only offered at Glacier Peak High School)</td>
<td>10-12</td>
<td>1 Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living on Your Own</td>
<td>11-12</td>
<td>1 Semester</td>
<td>11-12 Snohomish High School</td>
<td></td>
</tr>
</tbody>
</table>
Culinary Arts & Food Service Management

NAME
Emily Condit

PATHWAY
Family & Consumer Science

AGE
18

EDUCATION
Glacier Peak High School
Johnson and Wales University

“I loved all the CTE courses I took in high school. Every class I took I enjoyed a lot and I loved the teachers as well. I use a lot of the material that I learned in those classes today, which is really awesome!”

SCHOOL NAME
American Culinary Federation

APPRENTICESHIPS

SCHOOL NAME
Seattle Central College
The Art Institute of Seattle
Edmonds Community College

CERTIFICATES/COURSES

SCHOOL NAME
Washington State University
Seattle University
Central Washington University

TWO-YEAR DEGREES

JOBS
• Food Preparation Workers
• Apprentice Meat Cutter

FOUR-YEAR DEGREES

JOBS
• Chef/Head Cook
• Childcare Provider
• Fashion Designer

JOBS
• Dietician
• Counselors
• Interior Designer

CTE PATHWAYS 2019 - 17
# HEALTH SCIENCE

<table>
<thead>
<tr>
<th>PATHWAY COURSES</th>
<th>Grade</th>
<th>Length</th>
<th>Equivalency/ Requirement Met</th>
<th>College Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Biology for Global Health (only offered at Glacier Peak High School)</td>
<td>10-12</td>
<td>1 Year</td>
<td>Science</td>
<td>Yes</td>
</tr>
<tr>
<td>Sports Medicine I</td>
<td>10-12</td>
<td>1 Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adv. Molecular Biology for Global Health (only offered at Glacier Peak High School)</td>
<td>11-12</td>
<td>1 Year</td>
<td>Science</td>
<td>Yes</td>
</tr>
<tr>
<td>Sports Medicine II</td>
<td>11-12</td>
<td>1 Year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Molecular Biology** students can apply for summer internships at local research centers. Past participants have interned at Fred Hutchinson Research Center, Microsoft, BioQuest, Institute for Systems Biology.

**Sports Medicine** students job shadow the school’s athletic trainer as a student assistant in the training room and athletic events.
“Through the Molecular Biology for Global Health class, I learned that creating a state of health is key to our global future. Ever since, I have been chasing infectious diseases and am now a Ph.D. Candidate of Microbiology and Immunology.”
The Snohomish School District proudly partners with the TEALS Computer Science Program.
ENGINEER II - AT&T
TEALS Volunteer

NAME
Connor McDonald

PATHWAY
Information Technology

AGE
24

EDUCATION
Snohomish High School
UW - Electrical Engineering

“The TEALS program is a phenomenal opportunity for students to learn about computer science. The program's unique ability to get industry professionals into the classroom enhances the learning experience by demonstrating to students' real-life applications, which sparks deeper understanding and inspiration.”

APPRENTICESHIPS

PROGRAM NAME
ApprentiCareers.org

CERTIFICATES/COURSES

SCHOOL NAME
North Seattle Community College
Lake Washington Institute Technology
Edmonds Community College

JOBS
• Web Developer
• Software Developer
• Network Security Administrator

TWO-YEAR DEGREES

SCHOOL NAME
University of Washington
Gonzaga University
Eastern Washington University

FOUR-YEAR DEGREES

JOBS
• Information Security Analyst
• Computer Programmer
• Web Developer

JOBS
• Software Developer
• Computer & Information Research Scientist
• Database Administrator
# VISUAL COMMUNICATIONS

## MIDDLE SCHOOL
- **Digital Photo/Media Production**  
  (only offered at Valley View Middle School)  
  - Grade: 8  
  - Length: 1 Semester  
  - Equivalency/Requirement Met:  
  - College Credit: 

## HIGH SCHOOL
- **Intro to Digital Arts**  
  - Grade: 9-12  
  - Length: 1 Semester  
  - Equivalency/Requirement Met: Yes  
  - College Credit: Art  
- **Digital Video**  
  - Grade: 9-12  
  - Length: 1 Semester  
  - Equivalency/Requirement Met:  
  - College Credit: Art  
- **Photography**  
  - Grade: 10-12  
  - Length: 1 Semester  
  - Equivalency/Requirement Met: Yes  
  - College Credit: Art  
- **Adv. Photography**  
  - Grade: 10-12  
  - Length: 1 Semester  
  - Equivalency/Requirement Met:  
  - College Credit: Art  
- **Computer Graphics**  
  - Grade: 10-12  
  - Length: 1 Semester  
  - Equivalency/Requirement Met: Yes  
  - College Credit: Art  
- **Publications (Yearbook)**  
  - Grade: 10-12 Snohomish High School  
  - Length: 1 Year  
  - Equivalency/Requirement Met: Yes  
  - College Credit: Art or Senior English  

---
“My experience in yearbook, spanning my final two years at Glacier Peak, inspired me to pursue journalism at the Walter Cronkite School at Arizona State. While attending and since graduating, I’ve written for Sports Illustrated and MLB.com, covered ASU athletics and, for the past two years, worked at The Seattle Times, helping shape the voice and direction of my hometown sports section.”
The Snohomish School District does not discriminate in any programs or activities on the basis of sex, race, creed, religion, color, national origin, age, veteran or military status, sexual orientation, gender expression or identity, disability, or the use of a trained dog guide or service animal and provides equal access to the Boy Scouts and other designated youth groups. The following employees have been designated to handle questions and complaints of alleged discrimination: Civil Rights Coordinator – Scott Peacock, 1601 Avenue D, Snohomish, WA 98290, 360-563-7282, scott.peacock@sno.wednet.edu; Title IX Coordinator and ADA – Darryl Pernat, 1601 Avenue D, Snohomish, WA 98290, 360-563-7285, darryl.pernat@sno.wednet.edu; Section 504 Coordinator and Harassment, Intimidation and Bullying – Shawn Stevenson, 1601 Avenue D, Snohomish, WA 98290, 360-563-7314, shawn.stevenson@sno.wednet.edu.