

PROGRAM OF STUDY



Career Cluster: Transportation, Distribution, and Logistics
Maintenance

Career Cluster Pathway: Facility and Mobile Equipment

This Career Pathway Program of Study can serve as a guide along with other career planning materials as learners continue on a career path. Courses listed within this program are only recommended coursework and should be individualized to meet each learner's education and career goals. **Note:** Many items have links to external resources with more information.

REQUIRED CREDITS	GRADE	English/ Language Arts (4.0 credits)	Social Studies (2.5 credits)	Math (2.0 credits)*	Science (2.0 credits)	Fine Arts (1.0 credits)	Health/ Fitness (2.5 credits)**	Electives (6.5 credits)	Related Career & Technical/ Occupational (1.0 credits) Certificate and Tech Prep (notation on HS and TP alignment)	SAMPLE Occupations Relating To This Pathway (*indicates job in high demand) (☉ indicates a "green" job)	
SECONDARY	9	English 1 or Honors English 1	Pacific Northwest History (.5)	Algebra I Geometry	Integrated Science or Adv Int Science	Credits from Art Courses or CTE Equivalent	Health (.5)	Elective courses (6.5) and Project Me and Other CAA requirements	ASD CTE COURSE OPTIONS Car Care Intro to Auto Tech Auto Tech Advanced/Cooperative Work Experience Industrial Engineering Advanced Industrial Engineering Computer Programming Computer Programming II Work Based Learning CTE Grad Project LEADERSHIP Skills USA TECH PREP ARTICULATIONS Auto Tech Advanced – Grays Harbor College (5cr.) Beginning Industrial Engineering – Bates (7.5cr.) Computer Programming II – South Puget Sound Community College (5cr.) CERTIFICATION AYES Certification Refrigerant Handlers Certificate	Some Preparation <ul style="list-style-type: none"> Recreational Vehicle Service Technicians Automotive Glass Installers and Repairers Bicycle Repairers Railway Maintenance & Equipment Operators Medium Preparation <ul style="list-style-type: none"> Avionics Technician Aircraft Mechanics and Service Technicians* Automotive Service Technician Bus and Truck Mechanics and Diesel Engine Specialists Collision Repair Technician Diesel Engine Specialist Electrical/Electronic Technician Industrial Electrician Industrial Equipment Mechanic Off-Road Equipment Technician Motorboat Mechanics Motorcycle Mechanic Outdoor Power Equipment and Other Small Engine Mechanics Electrical and Electronics Installers and Repairers, Transportation Equipment Electronic Equipment Installers and Repairers, Motor Vehicles Farm Equipment Mechanics Motorcycle Mechanics Rail Locomotive and Car Mechanic and Repairer Ship Mechanic and Repairer 	
	10	English 2 or Honors English 2	US History	<i>*Class of 2013 (add't 1.0 credit)</i> or Algebra II or	Biology or AP Biology or Biotechnology or Horticulture or Natural Resources I		Credits from Health and Fitness Courses				**Successfully completing two years of physical education and one semester of health is required for high school graduation.
	11	English Electives or Business English	World History or Economics or Economics II	Pre-Calculus or Calculus or	Science Electives						
	12	English Electives or Business English	World History or Economics or Economics II and CWP	CTE Equivalent (Students must pass a math competency test or have four years of math credits.)							

Technical Certification <i>(instruction provided through certified training and/or testing centers)</i>	Apprenticeship Opportunities	2-yr or ATA Degree <i>(Find specific colleges at www.checkoutcollege.com)</i>	4 –yr Degree or Advanced Training
<p>ASE Certifications (requires 2 yrs of work experience in addition to passing exams)</p> <ul style="list-style-type: none"> Automobile/Light Truck Certification Automobile Service Consultant Alternate Fuels Series Medium/Heavy Truck Truck Equipment School Bus Transit Bus Collision Repair and Refinish Damage Analysis and Estimating Certification Engine Machinist Parts Specialist Advanced Engine Performance Specialist Electronic Diesel Engine Diagnosis Specialist Undercar Specialist Designation <p>NATEF Certification</p> <p>Automobile</p> <ul style="list-style-type: none"> Suspension and Steering Brakes Electrical/Electronic Systems Engine Performance Engine Repair Automatic Transmission/Transaxle Manual Drive Train and Axles Heating and Air Conditioning <p>Collision Repair and Refinish</p> <ul style="list-style-type: none"> Painting and Refinishing Structural Analysis & Damage Repair Non-structural Analysis and Damage Repair Mechanical and Electrical <p>Electrician</p> <ul style="list-style-type: none"> Bates Technical College Bellingham Technical College Big Bend Community College Perry Technical Institute Spokane Community College 	<p>To learn more about Apprenticeship, visit Labor and Industries website.</p> <p>Follow these steps to learn about the specific apprenticeships available in this pathway:</p> <p>STEP 1: Link to Apprenticeship Registration and Tracking System</p> <p>STEP 2: Search by using key words below or the SOC code listed</p> <ul style="list-style-type: none"> Aircraft Mechanic (51-2011; 51-4041) Auto Machinist (49-3023) Automotive Body Repair (49-3021) Diesel Mechanic (49-3031; 49-3023) Electrician (49-2097; 49-9012; 49-9051; 51-2022) Facilities Maintenance Mechanic (49-9042) Heavy Duty Equipment Mechanic(49-3031; 49-3042) Machinist (51-4041) Maintenance Machinist (51-4041) Maintenance Repairer (49-9042) Marine Machinist (51-4041) Mobile Equipment Mechanic (49-3031) NC Spar Mill Operator (51-4011) Painter (47-2141) Pipefitter (47-2152) School Bus Mechanic (49-3031) Sheet Metal Worker (47-2211) Shipwright (47-2031) Tractor Mechanic (49-3031) Trailer, Container and Van Repair Mechanic (49-3021) Transmission Tech (49-3023) Transportation Technician 2 (17-3022) Brake and Air System Technician (49-3021) Drive Train Systems Tech (49-3023) Steering & Suspension Tech (49-3023) <p>STEP 3: Click “View” and scroll down to find contact name and program standards for qualifications and how to apply</p>	<p>Aircraft Mechanics, Airframe/Powerplant</p> <ul style="list-style-type: none"> Big Bend Community College Clover Park Technical College Everett Community College South Seattle Community College Spokane Community College <p>Autobody/Collision and Repair</p> <ul style="list-style-type: none"> Bates Technical College Bellingham Technical College Clover Park Technical College Columbia Basin Community College Grays Harbor Community College Green River Community College Lake Washington Technical College Renton Technical College South Seattle Community College Spokane Community College Walla Walla Community College <p>Automotive Mech/Technology</p> <ul style="list-style-type: none"> Grays Harbor College and various other technical and community colleges <p>Diesel Mechanics</p> <ul style="list-style-type: none"> Grays Harbor College and some other technical and community colleges <p>Heavy Equipment Maintenance</p> <ul style="list-style-type: none"> Bellingham Technical College Big Bend Community College Lower Columbia College <p>Hydraulics & Fluid Power Tech</p> <ul style="list-style-type: none"> Spokane Community College <p>Marine Maintenance/ Repair</p> <ul style="list-style-type: none"> Olympic College Skagit Valley College <p>Motorcycle Maintenance and Repair</p> <ul style="list-style-type: none"> Lake Washington Technical College <p>Small Engine Mechanics and Repair</p> <ul style="list-style-type: none"> Bates Technical College Spokane Community College 	<p>Automotive Engineering Technology/Technician</p> <ul style="list-style-type: none"> Walla Walla College <p>Continued education and training various ASE and NATEF certifications.</p> <p>CTE Secondary Education Teacher</p> <ul style="list-style-type: none"> Education Degree in a CTE program area with 2000 hours of related work experience Industry Route Certificate requires 6000 hours of work experience in the field and completion of a state approved CTE Preparation Program along with passage of Basic Skills Math and English

<p>Considerable Preparation</p> <ul style="list-style-type: none"> Mobile Heavy Equipment Mechanics, Except Engines Service Manager Aerospace Engineering and Operations Technicians CTE Teacher <p>Extensive Preparation</p> <ul style="list-style-type: none"> Ship Engineers Facility Engineer Facility Maintenance Manager & Engineer
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*Data acquired from www.workforceexplorer.com, www.sbctc.edu, www.careerclusters.org, and www.edf.org/cagreenjobs,
 Adapted from <http://www.nthurston.k12.wa.us/education/components/scrapbook/default.php?sectiondetailid=34988>