

# Career Launch Endorsement Review (CLER) Application



INSTITUTION CENTRALIA COLLEGE

PROPOSED PROGRAM DIESEL TECHNOLOGY

Please note: **Registered Apprenticeship programs become automatically endorsed for Career Launch.**  
You need not submit an application. You will be contacted with information this fall.

CONTACT INFORMATION

Name: KATIE ADEN

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Title: CAREER AND TECHNICAL EDUCATION - NAVIGATOR

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10/10/2019

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Chief Academic Officer

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Date

Application contact: Scott A. Copeland  
Associate Director, College Relations and Policy Guidance  
Education Division  
Washington State Board for Community and Technical Colleges  
Office: 360-704-4397  
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*Applications are reviewed monthly and are due the first business day of the  
month.* Electronic submissions only to [scopeland@sbctc.edu](mailto:scopeland@sbctc.edu)

## Introduction

The Career Launch Program Endorsement recognizes high-quality career connected learning opportunities addressing persistent educational opportunity gaps, meeting the talent needs of employers and leading to academic learning and building awareness of, exposure to, and preparation for career opportunities.

## Application Materials

The following checklists outline the specific requirements for a CLER application. Additional evidence (e.g. existing program outcomes) may be submitted with your checklist responses.

Please note the following:

- Respond completely to the following three (3) checklists in your submission packet.
- Page limit: 20 pages, including letters of endorsement and letters of employer partners.
- Submit your completed application to Scott Copeland at [scopeland@sbctc.edu](mailto:scopeland@sbctc.edu).

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## Program Checklist

P1. Program description including length of program in years and total hours (including split between classroom and worksite).

Centralia College offers two degrees in Diesel Technology. An Associate in Applied Science for Diesel Equipment Technology and a Bachelor of Applied Science in Diesel Technology.

Centralia College's Diesel Equipment Technology Associate in Applied Science Degree is a two-year program resulting in approximately 105 - 107 credits. Students achieving the AAS degree will accumulate 506 hours of lecture, 1,188 hours of lab, and 210 hours at a worksite. In total, students will gain 1,904 hours of comprehensive classroom and worksite time combined.

Centralia College's Bachelor of Applied Science Degree in Diesel Technology is one of only four diesel technology bachelor's degree offerings in the United States! It has been noticed nationwide and an article on the program was recently featured in New America! This is huge for potential/future students!

### **More than turning wrenches: Centralia College uses applied baccalaureate programs to prepare the next generation of diesel technicians**

One of only four programs of its type, Centralia's applied bachelor's in diesel technology strikes the right balance of breadth and depth in academic and industry-focused higher education.

<https://www.newamerica.org/education-policy/edcentral/turning-wrenches-centralia-college-diesel-tech-applied-baccalaureate/>

This is a two-year program succeeding the two-year AAS Degree in Diesel Equipment Technology. The BAS degree would be completed during the student’s third and fourth years and will result in approximately 96 credits. Students obtaining their Bachelor’s Degree in Diesel Technology will accumulate 451 hours of lecture, 660 hours of lab, 20 credit hours of electives, and 150 hours at a worksite. In total, students will gain 1,261 hours of overall classroom and worksite time combined, not including electives.

Students who complete the full four-year Diesel Technology program at Centralia College will come out with an extreme level of comprehension. They will have accumulated 957 hours of lecture, 1,848 hours of lab, 20 elective credit hours, and 360 hours at a worksite. All of our Diesel Tech students will be well equipped for the workforce upon graduation here at Centralia College.

P2. Estimated number of hours per week at worksite and in classroom (this approach may shift throughout the program).

Students obtaining their Associate in Applied Science degree in Diesel Equipment Technology from Centralia College will acquire an estimated 25 hours a week in the classroom over the two-year program. The time estimated at a worksite will span over an 11-week period resulting in 19 hours a week.

Students obtaining their Bachelors of Applied Science degree in Diesel Technology from Centralia College will acquire an estimated 17 hours a week in the classroom over the two-year program following their AAS. The time estimated at a worksite will span over an 11-week period resulting in approximately 14 hours a week.

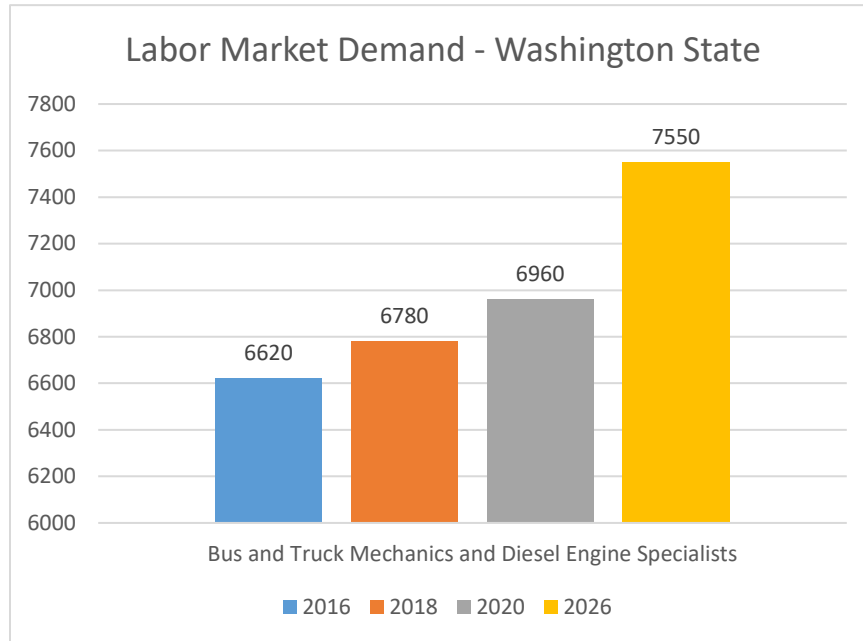
P3. Demonstration of labor market demand for specified skills/career in local region

Centralia College is located in the heart of Lewis County which is part of the Pacific Mountain Workforce. This includes Grays Harbor, Mason, Thurston, Pacific as well as Lewis County. The Pacific Mountain Ten-Year Occupational Employment Projections done by the Washington Employment Security Department, Labor Market and Economic Analysis Branch show that bus and truck mechanics and diesel engine specialists (SOC Code 49-3031) can expect to have a steady increase over the next ten years. Estimated employment in 2021 is projected at 631 and by 2026 employment is estimated at 662 with an annual growth rate of 1.3% from 2016-2021. Related fields of Automotive Service Technicians and Mechanics as well as Farm Equipment Mechanics and Service Technicians estimate a combined employment of 1,367 in 2021 with continual growth over a ten-year projection.

Pacific Mountain Ten-Year Occupational Employment Projections											
Washington Employment Security Department, Labor Market and Economic Analysis Branch											
SOC code	Occupational title	Estimated employment 2016	Estimated employment 2021	Estimated employment 2026	Average annual growth rate 2016-2021	Average annual growth rate 2021-2026	Average annual opening due to growth 2016-	Average annual opening due to growth 2021-	Average annual total openings 2016-2021	Average annual total openings 2021-2026	
49-3023	Automotive Service Technicians and Mechanics	1,209	1,283	1,316	1.2%	0.5%	15	7	129	126	
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	592	631	662	1.3%	1.0%	8	6	62	63	
49-3041	Farm Equipment Mechanics and Service Technicians	79	84	86	1.2%	0.5%	1	0	9	8	

Considering the entirety of Washington State for further expansion, Bus and Truck Mechanics and Diesel Engine Specialists employment trends are projected to grow. Short-term projections beginning

in 2018 as the base year had employment of 6,780 with an expected 2.7% increase by 2020 and projected employment of 6,960. Long-term projections with the starting base year in 2016 had employment of 6,620. This employment number is projected to increase by a massive 14% by the year 2026 with employment projected at 7,550. (Data from: Projections Central – State Occupational Projections – US Department of Labor’s Employment and Training Administration)



Looking at the nation as a whole, projected employment is expected to have a growth of 9% from 2016-2026. The state of Washington where our students will be graduating from have greater employment opportunities with the state being above the national percent of growth. Students completing the Career Launch program through Centralia College in Diesel Technology have great promise of landing careers, this is an exciting time for our Diesel Technology students and their future occupational dreams!

National	Employment		Percent Change	Projected Annual Job Openings*
	2016	2026		
United States	278,800	304,600	9%	28,200

State	Employment		Percent Change	Projected Annual Job Openings*
	2016	2026		
Washington	6,620	7,550	+14%	720

. From "[49-3031.00 - Bus and Truck Mechanics and Diesel Engine Specialists](#)" by the National Center for O\*NET Development. Used under the [CC BY 4.0](#) license.

P4. Projected count of student enrollment, student completion, and anticipated employer participation for 5 years, post-pilot.

Projected count of student enrollment for both Diesel Tech Degrees (AAS & BAS) is 24 per year per program. Out of that 24 we project an average of 20 students to complete the program. We estimate approximately 50% of those 20 students to complete the Career Launch program. With these projections we can guesstimate 9 students per program would go through full completion of Career Launch. Resulting in 18 Diesel Tech students a year AAS and BAS students combined.

P5. Concise description of development process to create the Career Launch program (e.g. who was involved, when, how was the program piloted, etc.)

The first meeting regarding Centralia College's career launch was on September 3, 2019 and was comprised of:

- Joyce Hammer – Vice President of Instruction
- Jake Fay – Dean of Instruction; Industrial and Healthcare
- Connie Smejkal – Dean of Instruction; Business, Education and Family Development
- Kelli Bloomstrom – Dean of Instruction; Transitional Studies & CC East
- Monica Brummer – Program Coordinator; Financial Aid
- Katie Aden – Career and Technical Education Navigator

The Career Launch program was developed through an intensive look at programs who meet specific needs for our community as well as outlook of labor market trends that maintain steady employment and continued growth. Communication with local industry employers as well as faculty was a fundamental outcome to gaining partnership for Career Launch students and maintain sustainability for future students in years to come. Conversations were struck up with the local school districts (Centralia and Chehalis) as well as their foundations to explain and inform the need as well as benefits of Career Launch Programs. It was vital to inform the community about what Centralia College is planning to implement. Collaboration was made with directors of funding sources from WorkFirst, WorkSource, and BFET to gain feedback on insight from their perspective.

P6. Signed letter of endorsement from all relevant partners, stakeholders and regional networks (Including employers, labor organizations, academic institutions, community-based organizations, individuals, and other relevant stakeholders in support of the proposed Career Launch program). Regional network endorsement preferred.

See Attachments – Endorsements from:

1. Harold Lemay Enterprises
2. Penske
3. Peterson Caterpillar
4. RMT Equipment

P7. Description of resources, supports, or other processes to recruit and support students from underserved backgrounds (e.g. including students of color, students from low income families, English language learners, students with disabilities, foster students, students experiencing homelessness, students from single parent homes, and other populations that face barriers to employment); or create an implementation plan to do so.

Centralia College has created a position this year of the Career and Technical Education Navigator. This role for the college serves as a primary point of contact for K-12 partners and industry partners to facilitate guided pathway guidance for CTE students from high school to college and to the workplace! This position and role in the community makes us stand out from other educational programs! Developing relations with and collaborating with K-12 partners to facilitate dual credit opportunities for students will ensure the community is gaining knowledge and encourage students to get a jump start on CTE & Career Launch Programs. The CTE Navigator will coordinate field trips for K-12

students to come to campus, participate in hands-on activities, and meet program faculty. Developing relationships with local industry and advisory boards to determine employer workforce needs will be key in ensuring career launch programs are up to industry standards and students are well prepared for the workforce! The navigator position is the first point of contact for student assistance in locating school resources, monitoring progress and connecting students with industry! This role for Centralia College is going to be undoubtedly beneficial for our Career Launch Programs and student success!

In addition to the Career and Technical Education Navigator position, other recruitment strategies are: Financial Aid holds FAFSA Fridays in addition to visiting local high schools to promote financial aid; Informational materials in Spanish about program/class offerings for ELL students and families; Outreach to College Bound students; Outreach to students that have applied for Financial Aid with incomplete files; Representatives from Financial Aid travels to Centralia College East to answer general admission questions, promote BFET, WorkFirst and Opportunity Grant, and to aid in completion of FAFSAs.

Further Resources and Support and Centralia College: BFET (Basic Food Employment and Training) funding; Instructional Techs hired to work with ELL students; Opportunity Grant funding; Representatives from Enrollment Services, Counseling, and Teacher Education, Family Development and Business attended statewide conference to learn about Passport and McKinney-Vento programs and scholarships. They are also campus point of contacts; TRiO (Student Support Services, Talent Search, and Upward Bound); Veterans Gap Funding (helps recently release veterans with funding before their Veterans Administration Educational Benefits become active); Veterans, and eligible spouses and dependents and some students with disabilities are authorized to register during Early Registration; Volunteers provide ELL students with in-classroom support; WorkFirst funding.

### Industry-Related Checklist

I-R1. Address of worksite(s) where Career Launch students will complete supervised training.

EMPLOYER	WORKSITE	CITY	STATE	ZIP
HAROLD LEMAY ENTERPRISES	1713 N PEARL ST	CENTRALIA	WA	98531
PENSKE	7647 BETTI LN NE	LACEY	WA	98516
	1460 THORNE ROAD	TACOMA	WA	98421
PETERSON CATERPILLAR	1205 BALTIMORE ST	LONGVIEW	WA	98632
	5450 NE FIVE OAKS DR	HILLSBORO	OR	97124
RMT EQUIPMENT	1696 BISHOP RD	CHEHALIS	WA	98532

I-R2. Hourly wage for Career Launch participants.

EMPLOYER	HOURLY WAGE
HAROLD LEMAY ENTERPRISES	\$14.50 - \$16.00
PENSKE	\$18.22 - \$24.39
PETERSON CATERPILLAR	\$19.00 - \$23.00
RMT EQUIPMENT	\$16.00 - \$17.00

I-R3. List of entry-level positions and associated job descriptions for which a Career Launch student would be eligible for upon completion.

**Bus & Truck Mechanic & Diesel Engine Specialists:** Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.

**Heavy Truck Technician:** Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and surface mining.

**PM Mechanic:** A PM technician, or preventative maintenance technician, ensures that machines and equipment are in working condition. As a PM technician, you may perform repairs on company equipment or travel to customer homes to provide service. Your job duties involve routine maintenance, troubleshooting, repairs, and machine setup. The career qualifications typically include at least a high school diploma or GED certificate and on-the-job training. Employers may also require relevant experience in a similar industry and trained safety and HVAC certifications.

**Shop Technician Trainee:** A diesel shop technician trainee has the job of repair and maintenance of diesel engines that power many types of equipment, such as buses, construction vehicles, and agricultural equipment. The diesel technician is responsible for repairing diesel engines and all the components that help to make the engines operate efficiently. Electronics, such as fuel regulators, emissions controls systems, and timing systems are often added to original power plants, so the diesel technician makes use of laptop or hand-held computer units to improve efficiency.

**Entry Level Technician:** Maintains diesel equipment operation by completing inspections and preventive maintenance requirements; correcting vehicle deficiencies; making adjustments and alignments; keeping records.

I-R4. List of specific skills and competencies required for completion of Career Launch program, with demonstrated alignment to entry-level positions, job descriptions, and average local salary ranges.

Employers are asking for basic mechanical skills, basic computer skills, the ability to solve problems, comfort using tools, excellent communication and customer service skills, ability to communicate in written form, ability to work as part of a team, regular attendance, as well as foundational training on all diesel systems.

Centralia Colleges Diesel Technology Programs specifically align to these needs through course curriculum, objectives and outcomes. Students will be able to perform repair procedures using proper tools while abiding by safety and environmental regulations; Identify, diagnose and repair electrical and hydraulic circuits; Maintain proper workplace documentation in a professional manner; Conduct behavior that is consistent with the professionalism standards of the industry. BAS students will gain further experience in diesel technologies, acquire well-grounded knowledge in management and possess skills in leadership, communication, teamwork, and ethical values to progress to senior technological positions. Specific courses and descriptions adhering to competencies required for Career Launch completion provided below:



EMPLOYER NEEDS	COURSE	TITLE	DESCRIPTION
<b>BASIC MECHANICAL SKILLS &amp; FOUNDATIONAL TRAINING</b>	TMATH 116	INDUSTRIAL MATHEMATICS	Application of basic mathematical operations to specific workforce programs including common fractions, decimal fractions, percentages, ratio and proportion, practical algebra, and computations involving rectangle and triangles. Emphasizes the use of mathematics in diesel and welding.
	DET 100	SHOP SKILLS	Theory and application of basic tools and practices as used in heavy equipment repair facilities
	DET 125	POWER TRANSMISSION	Theory and application of mechanical power transmitting devices and associated components as used in diesel powered equipment
	DET 102	FORKLIFT	A comprehensive classroom training with practical, and hands-on instruction on forklift operation and safety. Course covers state and federal regulations.
	DET 110	MOBILE ELECTRICAL SYS I	Exploration and application of fundamental principles of direct current electrical systems found on mobile equipment
	DET 130	MOBILE HYDRAULIC SYSTEMS	Students will be introduced to terminology, physical properties, and principles relating to mobile hydraulic equipment.
	DET 120	INTERNAL COMBUSTION ENG	This course covers the operating principle of internal combustion engines. A variety of diesel engines will be disassembled and reassembled with the use of service manuals.
	DET 200	MOBILE ELECTRICAL SYS II	Students will examine electrical components and electronic systems. This course will cover electronic control modules and advanced direct current troubleshooting.
	DET 220	INTERNAL COMBUSTION ENG II	This course will cover diesel engine analysis and testing for optimal performance and longevity. Students will perform live engine testing, troubleshooting, and repairs.
	DET 210	POWER TRANSMISSION II	The study of power-shift and automatic transmissions as used in diesel powered equipment.
	DET 225	HEAVY-DUTY CHASSIS SYST	The study and application of heavy duty chassis systems used in diesel powered equipment.
	DET 230	PRACTICAL SHOP APPLICATIONS	The discussion and implementation of proper shop practices and repair procedures.
	DET 235	MOBILE HVAC SYSTEMS	The theory and application of basic principles used in Heating Ventilation and Air Conditioning (HVAC) systems of diesel powered equipment.
	HLTH 145	SAFETY & FITNESS	The course emphasizes the importance of safety, first aid, and exercise as they relate to an individual's level of health and fitness. Includes First Aid/CPR and AED Certification.
<b>BASIC COMPUTER SKILLS</b>	IT 117	INTRO TO WINDOWS OS	An introduction to the Windows Operating System. Course will cover such things as the taskbar, start menu, recycle bin, window views, window explorer, storage devices, printing, saving, control panels, etc.
<b>COMMUNICATION &amp; CUSTOMER SERVICE SKILLS (WRITTEN &amp; ORAL)</b>	WRT 105	WRITING IN THE WORKPLACE	Study a variety of workplace communications, along with proper use of grammar, sentence structure, mechanics and vocabulary within those communications.
	HR 110	HUMAN RELATIONS - WORKPLACE	The study of behavior, personality, self-management, self-development, and elementary business psychology of the workplace. Focus on understanding and demonstrating skills imperative to workplace success including communications, personal attitude, motivation, and workplace etiquette.
	BTEC 191	WORK EXP SEMINAR	Discussion topics include professional image, business etiquette, sexual harassment, resolving conflict, and diversity in the workplace.

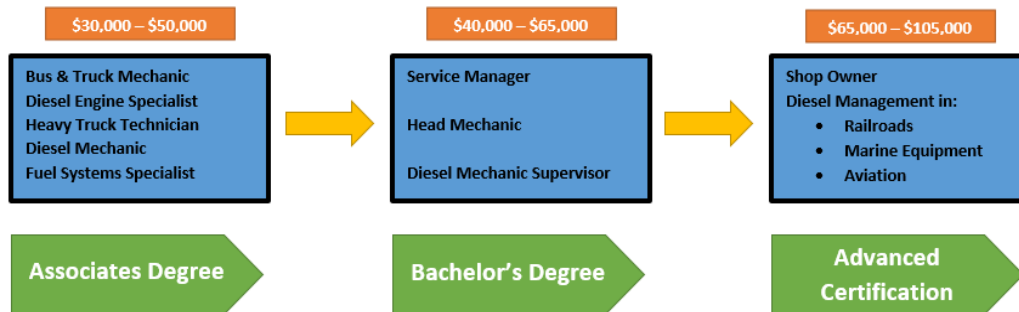
I-R5. Employer attests that Career Launch program is in compliance with required federal, state, and local regulations.

Centralia College has verified that LeMay Waste Connections, Penske, Peterson Caterpillar, and RMT Equipment are all under compliance with required federal, state, and local regulations. Memorandums of understanding are kept on file in the Career and Technical Education office.

I-R6. Employers will outline a student supervision and mentorship model.

EMPLOYER	SUPERVISION/MENTORSHIP MODEL
Harold LeMay Enterprises	Work with mechanics to improve their skills. Work safe. Report to manager daily.
Penske	Student will be eligible to participate in our online training courses, these lead to ASE certification. They will receive on the job training with their shift supervisors. The shift supervisor and branch service manager are required to evaluate their skills every several months to ensure they are receiving the necessary training and implementing that training into their daily routines.
Peterson CAT	Student is paired up with a lead person(s) initially but as the person gains more knowledge/experience they are given more freedom to work on projects with lesser supervision. However, the student always has a resource should they need help.
RMT Equipment	Reports to shop foreman who will mentor and provide specific equipment technical training, and basic equipment set up and skills.

I-R7. Description of common career pathway(s) beginning with entry-level position specified with demonstration of likely salary growth over specified time period.



Based off of research from local job postings as well as the 2009-2015 Diesel Mechanic Guide: entry-level positions include starting salaries for Bus & Truck Mechanic, Diesel Engine Specialist, Heavy Truck Technician, Diesel Mechanic, and Fuel Systems Specialist range from \$30,000 - \$50,000. Most of these jobs are attainable with an Associate's Degree. The next level on the tier would include jobs in the realm of Service Manager, Head Mechanic, or Diesel Mechanic with a salary range from \$40,000 - \$65,000. These jobs typically require a Bachelor's degree. To earn the highest salary available in this career, diesel mechanics can own their own shops or work in management positions in the following industries: Locomotive Industry, overseeing and repairing diesel-powered locomotives; Marine Equipment, overseeing and repairing diesel-powered engines in ships, watercraft, and boats; Aviation, specializing in preventative maintenance of diesel engines in aircrafts.

I-R8. Demonstrated competency alignment with relevant professional standards for specified entry-level positions when applicable.

Course objectives are vetted through the advisory board to ensure that the program is providing an education for students that is up to date, relevant, and current to business, industry, labor and employment practices. Centralia College's Diesel Technology programs ensure the students have full competency of daily tasks and knowledge of their trade in order to diagnose, repair, adjust, or maintain any type of diesel engine. Aside from the hands-on mechanical aspect of the job, students

are also required to take courses that align with professional standards such as Intro to Windows OS, Writing in the Workplace, Safety & Fitness, and Human Relations in the Workplace. Students obtaining their Bachelor of Applied Science in Diesel Technology are prepared mechanically but also in the realm of management. Required courses include Applied Management, Professional and Organizational Communication, Shop/Fleet Management, as well as Ethics.

- I-R9. Signed letter from employer's partners attesting that Career Launch completers will be ready for specified entry-level jobs, including an optional, non-binding commitment estimating number of Career Launch completers they plan to interview/hire over the first three years of the program.

Memorandums of Understanding are kept on file in the Career and Technical Education office at Centralia College from employers attesting Career Launch completers will be ready for specified entry-level jobs. LeMay has stated that hiring will be dependent on open positions; Penske will interview/hire approximately 4 career launch completers over a 3-year period; Peterson Caterpillar will interview/hire 5-10 career launch completers over a 3-year period; and RMT Equipment will interview/hire an estimated 4 career launch completers over a 3-year period.

## Academic-Related Checklist

- A-R1. List of academic institution(s) providing career-aligned instruction for Career Launch program.

Centralia College  
600 Centralia College Blvd  
Centralia, WA 98531

Other local academic institutions providing Diesel Technology academic instruction in Diesel Tech:

- Bates Technical College (Tacoma, WA)
- Grays Harbor College (Aberdeen, WA)
- Clark College (Vancouver, WA)
- Lower Columbia College (Longview, WA)
- Lake Washington Institution of Technology (Kirkland, WA)
- Seattle Community College – South Campus (Seattle, WA)

- A-R2. Curriculum scope and sequence aligned to skills and competencies provided in employment checklist.

Centralia College's AAS in Diesel Equipment Technology align to skills and competencies through course curriculum and objectives. Students who successfully complete this program should be able to: Perform repair procedures using proper tools while abiding by safety and environmental regulations; Identify, diagnose and repair electrical and hydraulic circuits; Maintain proper workplace documentation in a professional manner; Conduct behavior that is consistent with the professionalism standards of the industry.

Advanced Diesel Technology curriculum scope and sequence provided through Centralia Colleges BAS program in Diesel Technology allow students for further employment growth in the industry with opportunities for advanced placement. Students who successfully complete this

program will have demonstrated the ability to accomplish the following technical skills: Analysis and evaluation of data – analyze and evaluate data collected from component failures, hydraulic systems, and complex electrical circuits; Professional interactions – interact appropriately and professionally with customers and employees; Complex system operations – explain the operation of complex systems including: computerized engine and transmission controls used for fuel efficiency and emissions control; regenerative hybrid technologies used to capture energy; multi-fuel technologies to save fuel costs; Theory application – apply theories and skills taught in the classroom and in a shop environment; Shop procedures – create shop procedures that reflect industry standards and maintain compliance with regulations set by governing agencies; Fluids analysis – apply the principles of tribology in the analysis of engine efficiency, life, and maintenance costs; Analysis of failure modes – analyze test results from oil, coolant, fuel, or emissions analysis systems.

Students completing Centralia Colleges BAS-DT Program will also gain managerial skills and competencies including: Policies and Practices – implement the practices, policies, and leadership to efficiently operate a fleet or repair facility; HR management and ethical principles – apply fundamental principles of human resource management and ethics; Communications – employ effective oral, written, and analytical communication appropriate to organizational settings including personnel situations and in large group discussions; Leadership Styles – distinguish between management and leadership, and differentiate among the varieties of styles and roles of management and be able to identify the most appropriate in any given situation; Use of teams – create, manage, and participate effectively in teams.

- A-R3. Demonstration of student supports (e.g. mentoring, advising, financial aid, tutoring) available for Career Launch students enrolled in the course.

Every student at Centralia College is paired with a faculty advisor to help them navigate their way through their educational paths. Centralia College has a magnitude of resources on campus including:

- Advising/Counseling Center: a critical piece of academic success and finishing a degree or certificate efficiently. Advisors can help you choose classes, navigate college life, and provide critical support during your education.
- Disability Services: for students with disabilities, CC offers support services to help you access programs and services.
- Blazer Central: a student resource and success hub. It is a relaxed and supportive study and collaboration space that offers programming that promotes student success.
- Food Pantry: provide free food and personal care items to CC students experiencing food insecurity.
- Financial Aid (types of aid): Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Washington State Passport to Careers, Washington State Need Grant, Federal and State Work-Study, Centralia College Foundation Scholarships.
- Worker Retraining Program: assist with tuition, fees, books, and supplies for those who qualify.
- WorkFirst Program: covers the cost of tuition and books for eligible students.
- Basic Food Employment and Training (BFET) Program: partnership between Centralia College and the Department of Social Services (DSHS).
- Programs for Children and Families
- Student Life

- TRiO Programs: provide equal opportunity for all Americans regardless of race, ethnic background, or economic circumstances.
- Student Support Services: aid first-generation, economically disadvantaged, and students with disabilities to stay in college and/or transfer to a four year and earn their bachelor's degree.
- Veteran and Military Resources: veteran's admission, veteran's center, resources for veterans.

A-R4. Number of postsecondary credits provided and / or credential earned upon completion of program.

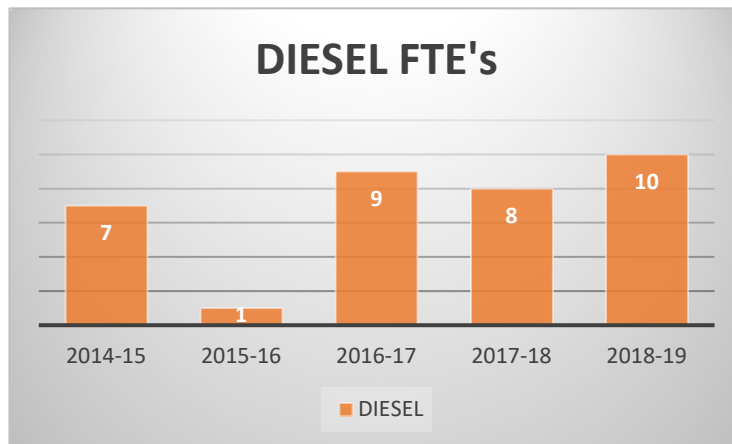
Centralia College's 2-year program in Diesel Equipment Technology will earn the student an Associate's degree in Applied Science for Diesel Equipment Technology, with an estimated 105-107 credits.

Centralia College's two-year program succeeding the two-year AAS degree will earn the student a Bachelor's Degree in Applied Science for Diesel Technology, with an estimated 96 credits.

A-R5. Demonstrated curricular alignment with relevant professional and / or academic standards associated with coursework and credential, when applicable.

See Attached Educational Planners

A-R6. Details of potential for current or future partnerships and/or scalability of the program within and across sectors and/or geographic locations (e.g. articulation, degree pathways), when applicable.



The chart above shows Centralia College's previous 5-year trend in full time equivalents. If you exclude the abnormal year in 2015-2016 there is an 8.5 average in FTE's. Our goal with the Career Launch Program and fiscal support as well as outreach with the Career and Technical Education Navigator is to have an increase of 2 FTE's per year. Scalability will be reached through conversations with local school districts regarding dual-credit articulations for future students to step into Career Launch programs. The new Career and Technical Education mobile lab known as the Swift Building will allow for scalability of the program. State work study has also been talked about for scalability of the Career Launch Program. Gaining further partnerships and continuing to expand knowledge/growth among the community.

End of Application.

Advisor \_\_\_\_\_



Name \_\_\_\_\_

Assigned By \_\_\_\_\_

Date \_\_\_\_\_

# 2019-20 EDUCATIONAL PLAN

## Associate in Applied Science Diesel Equipment Technology

Course Placement Recommendations: English \_\_\_\_\_ Reading \_\_\_\_\_ Math \_\_\_\_\_

ENGL 098  
 ENGL 099

READ 099

MATH 095  
 MATH 096

MATH 098  
 MATH 099

**Required: Math score eligible for MATH 116 or higher to enroll into any DET courses besides DET 102.**

**Fall Quarter, First Year** **Credits**

IT 117	Intro to Windows OS	3
DET 100	Shop Skills	7
DET 125	Power Transmission	7
DET 102	Forklift *	1
		<u>18</u>

**Winter Quarter, First Year** **Credits**

DET 110	Mobile Electrical Sys I	7
DET 130	Mobile Hydraulic Systems	7
TMATH 116	Industrial Mathematics	OR
Quantitative Skills (M)		5
		<u>19</u>

**Spring Quarter, First Year** **Credits**

WRT 105	Writing in the Workplace	OR
ENGL& 101	English Composition I (C)	5
DET 120	Internal Combustion Eng	7
Welding Elective		5
		<u>17</u>

**Fall Quarter, Second Year** **Credits**

DET 200	Mobile Elect Sys II	7
DET 220	Internal Comb Engines II	7
HLTH 145	Safety & Fitness (HF)	3
		<u>17</u>

**Winter Quarter, Second Year** **Credits**

BTEC 191	Cooperative Work Exp Seminar**	1
DET 210	Power Transmission II	7
DET 225	Heavy-Duty Chassis Syst	7
H R 110	Human Relations-Workplace	5
		<u>20</u>

**Spring Quarter, Second Year** **Credits**

DET 230	Practical Shop Applications ***	OR
DET 190	Cooperative Work Experience***	7
DET 235	Mobile HVAC Systems	7
		<u>14</u>

**Total Credits 105**

\*DET 102 must be completed during the first year.

\*\*BTEC 191 can be taken any quarter prior to or in the same quarter as DET 190

\*\*\*Students must take either DET 230 OR DET 190.

Recommended Welding Electives: WELD 151, WELD 161, WELD 180, WELD 181, WELD 182,

**Students will need to purchase tools for class.**

**Please see a diesel instructor for tool list.**

Students interested in fulfilling BAS-DT program admissions requirements should take ENGL& 101 and 5 credits of Quantitative Skills in college level math. (MATH& 107 recommended).

QTR/YR \_\_\_\_\_ CREDITS \_\_\_\_\_

QTR/YR \_\_\_\_\_ CREDITS \_\_\_\_\_

QTR/YR \_\_\_\_\_ CREDITS \_\_\_\_\_

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# 2019-2020 EDUCATIONAL PLAN

## Bachelor of Applied Science Diesel Technology

### Recommended course schedule

#### Fall Quarter, Junior Year Credits

DET 102 Forklift Certification	1
DET 300 Applied Management	5
DET 320 Emissions Control	5
Elective	<u>5</u>
	16

#### Winter Quarter, Junior Year Credits

DET 325 Material Science of Fluids** (NS) *	5
DET 335 Regulatory Issues	5
Elective	<u>5</u>
	15

#### Spring Quarter, Junior Year Credits

DET 345 Metalwork and Fabrication	5
DET 355 Hybrid Drives Electric/Hydraulic	5
DET 365 Internship	5
Elective	<u>5</u>
	20

#### Fall Quarter, Senior Year Credits

CMST 330 Prof and Org Communication** (H) *	5
DET 430 Shop/Fleet Management	5
DET 455 Applied Failure Analysis	5
	<u>15</u>

#### Winter Quarter, Senior Year Credits

DET 435 Hydraulics II	5
DET 445 Combustion Engine Fuels	5
Elective	<u>5</u>
	15

#### Spring Quarter, Senior Year Credits

DET 415 Electrical III *	5
DET 465 Power Generation & Maintenance	5
HUM 315 Ethics** (H) *	<u>5</u>
	15

Total Credits 96

\* Course has a prerequisite.

\*\*Must meet GUR's (General University Requirements/  
Distribution Requirements) as listed under the Associate in Arts  
Degree (DTA).

QTR/YR \_\_\_\_\_ CREDITS \_\_\_\_\_

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The following courses must be completed prior to bachelor degree  
obtainment. Some courses can be included in the two year degree or  
be completed during the bachelor's program in addition to the required  
courses.

Students must complete a total of 60 credits of General Education  
courses carrying the following distributions prior to graduation. Courses  
that cannot be included in an associate degree are bolded.

- Communication (C) 10 credits
  - \_\_\_\_\_
  - \_\_\_\_\_
- Humanities (H) 10 credits
  - CMST 330 Prof & Org Communication**
  - HUM 315 Ethics**
- Social Science (SS) 10 credits
  - \_\_\_\_\_
  - \_\_\_\_\_
- Quantitative Skills (M) 5 credits
  - \_\_\_\_\_
- Natural Science (NS) 10 credits, one course with lab
  - DET 325 Material Science of Fluids**
  - \_\_\_\_\_
- Distribution Elective (C), (H), (SS), (M), (NS) 15 credits
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_





**HAROLD LEMAY ENTERPRISES**  
A Subsidiary of Waste Connections, Inc.

September 18, 2019

Dear Washington State Board for Community and Technical Colleges,

We are pleased to give our support and partnership to Centralia College's Career Launch Program in Diesel Technology. We are committed to helping Centralia College in their goal of exposing students to meaningful, high quality on-the-job experience that is aligned with the student's classroom learning. We know first-hand the importance of having qualified and trained technicians. With an industry that continues to grow we find the Career Launch program beneficial not only for students but for industry as well, leading students from the Diesel Technology Program at Centralia College toward satisfying and economically sustaining careers with professional experience upon graduation.

Many of the careers in demand within our local area are in the trades. Centralia College's Diesel Technology Program provides a solid foundation of industry-related objectives through structured, hands-on curriculum that is consistent with employer needs. Creating a pathway for students to directly attain exposure in the workplace demonstrates their commitment to the local community, educational, and economic needs. Career Launch participants will continue to expand experience through our efforts to be able to successfully compete for jobs that are sustainable, attainable, and fulfilling. Students can expect to gain tremendous experience within the realm of working conditions, physical demands of the job, and gain confidence in their skills and abilities.

Career-connected learning is the foundation for the future of our industry. Diesel and Service Technicians are in demand in Washington State, more importantly in Lewis County where Centralia College is located with an expected growth of 12.9% over the next 10 years. We are proud to align with Centralia College and their Career Launch efforts for a more sustainable and promising future of industry employees.

Sincerely,

A handwritten signature in black ink, appearing to read "Derek McKinley", is written over a white background.

Derek McKinley  
Maintenance Manager

**1713 N. PEARL, CENTRALIA, WA. 98531**  
**PHONE: 360-736-4769 800-525-4167**



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Sincerely,

A handwritten signature in black ink that reads "Abe Estimada". The signature is written in a cursive, slightly slanted style.

Abe Estimada, recruiter, Penske



September 18, 2019

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Sincerely,

A handwritten signature in blue ink, appearing to read "Randy Shelton", with a long horizontal flourish extending to the right.

Randy Shelton

Talent Acquisition Manager

Peterson Caterpillar

Peterson Cat  
5450 NE Five Oaks Dr.  
Hillsboro, OR 97124

September 26, 2019

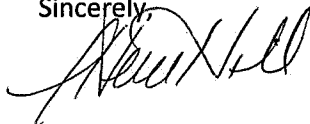
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Sincerely,

A handwritten signature in black ink, appearing to read "Alvin Hill", written over the word "Sincerely,".