



# ACCREDITATION EVIDENCE

**Title:** Diesel Program Review

**Evidence Type:** Corroborating

**Date:** 2021-2022

**WAN:** 22-0455

**Classification:** Resource

**PII:** No

**Redacted:** No



# Response CERTIFICATION

**Name of Institution:** Western Wyoming Community College

**Date of Submission:** 2021-2022

## **Part 1. SIGNATURES ATTESTING TO RESPONSE**

By signing below, we attest to the following:

1. That Western Wyoming Community College has conducted an honest assessment of Response and has provided complete and accurate disclosure of timely information regarding Response with the Core Requirements, Comprehensive Standards, and Federal Requirements of the Commission on Colleges.
2. That Western Wyoming Community College has attached a complete and accurate listing of all programs offered by the institution, the locations where they are offered, and the means by which they are offered as indicated on the updated "Institutional Summary Form Prepared for Commission Reviews," and that the comprehensive assessment of Response reported on the Response Certification includes the review of all such programs.
3. That Western Wyoming Community College has provided a complete and accurate listing of all substantive changes that have been reported and approved by the Commission since the institution's last reaffirmation as well as the date of Commission approval.

### **Accreditation Liaison**

**Name of Accreditation Liaison:**

**Signature:** \_\_\_\_\_

**Date:**

### **Chief Executive Officer**

**Name of Chief Executive Officer:**

**Signature:** \_\_\_\_\_

**Date:**

# **Diesel and Heavy Equipment Academic Program Review**

**Name of Institution:** Western Wyoming Community College

**Year:** 2021-2022

# 1 Program Purpose

## 1 Program Activity

Describe specific education goals, objectives, and activities of the program. Provide a clear and organized description of three specific education goals, objectives, and activities of the program.

## Response

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First and foremost – Teaching a trade our students can use for the rest of their lives, in and out of the

industry. For example, changing engine oil at home or performing an engine overhaul at a professional shop and clutch replacements.

Second – To prepare students for employment opportunities in the Diesel/ Heavy Equipment field, or as a supplement for a combined skills occupation such as mine maintenance, automotive and Welding.

Third – Through hands on training, provide experience and guidance to advance student knowledge and aptitude toward diesel mechanics and heavy equipment mechanics.

## **2 General Education and Other Disciplines**

Explain how the program serves the general education program. Provide a clear and organized explanation of how the program serves the general education program.

### **Response**

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Our trade is very dependent on our ability to find proper information, convey that information to coworkers and making reports of your findings in a precise format. We serve the general education program with use of English, communication, and basic math. These skills are a very important part of being a quality mechanic.

### 3 Market Demand

Document market demand and/or state/industry need for careers stemming from the program. Provide and document two sources showing the market and/or state/industry demand for graduates of this program.

#### Response

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Bus and truck mechanic and diesel engine specialists had 275,400 mechanics in 2020 with an expected increase of 8% by 2030 resulting in 296,800 mechanics by 2030.

Source:

<https://www.bls.gov/ooh/installation-maintenance-and-repair/diesel-service-technicians-and-mechanics.htm>

## Diesel Mechanic Demand

According to the [Bureau of Labor Statistics](#) (BLS), diesel mechanics and technicians are in [high demand across America](#), with approximately 242,200 technicians being employed in the mechanic industry.

The 2010 report predicts that the demand for mechanics is expected to increase by 15 percent between the years of 2010 and 2020, providing diesel technicians with 35,200 more [job opportunities](#).

**A recent report by the BLS shows that the top five states hiring diesel mechanics include:**

- **[Texas](#)**: 21,180 jobs with an annual mean wage of \$40,460
- **[California](#)**: 18,620 jobs with an annual mean wage of \$49,710
- **[New York](#)**: 11,300 jobs with an annual mean wage of \$50,430
- **[Ohio](#)**: 10,090 jobs with an annual mean wage of \$42,750
- **[Pennsylvania](#)**: 10,080 jobs with an annual mean wage of \$41,830

The demand for diesel mechanics vary with each state and industry, requiring aspiring mechanics to have the right level of educational training and hands-on experience in order to obtain the

desired position. According to the [BLS](#), the top five industries with the highest employment demand for diesel mechanics include:

- **General Freight Trucking:** 32,020 jobs
- **Local Government:** 21,160 jobs
- **Supply Merchant Wholesalers:** 18,950 jobs
- **Automotive Repair and Maintenance:** 18,320 jobs
- **Specialized Freight Trucking:** 13,740 jobs

## Educational Requirements

Most employers in the United States only hire diesel mechanics who have earned a high school diploma and a degree in diesel technology.

Individuals can choose between an Associate of Science in Diesel Technology, which takes at least two years to complete, and a Bachelor of Science in Diesel Technology, which takes at least four years to complete.

Students can attend a vocational, community, or technical school, but the diesel technology program should be accredited through the proper organization, such as the [National Automotive Technicians Education Foundation](#) (NATEF).

Associate degree programs provide students with classroom instruction and lab experience in a garage or lab setting. Diesel technology programs help students learn diesel technology methodologies and techniques to develop the necessary practical skills for auto machinery.

Students will need to be able to successfully troubleshoot and repair diesel-powered vehicles, diagnose mechanical issues, implement repair plans, and control engine services.

For those who wish to further their career in diesel technology, [diesel mechanic schools](#) offer a bachelor's degree, which prepares diesel mechanics for management positions. Bachelor programs train students on the core fundamentals of diesel technology methodologies and techniques, covering topics in mathematics, natural sciences, and humanities. Coursework may include:

- Air conditioning systems
- Hydraulics
- Preventative maintenance
- Electrical systems
- Power transmissions
- Braking systems



- Diesel engine systems

## Diesel Mechanic Certification

Most states do not require diesel mechanics to earn national certification in this field, but many employers prefer to hire those who have earned special certification, showing the diesel mechanics have successfully met the industry's standards.

Graduates can earn national certification through an accredited institution, such as the [National Institute for Automotive Service Excellence](#) (ASE). Testing will cover subjects on preventative maintenance, electrical systems, and braking systems of diesel engines.

## Career Opportunities

Individuals entering into the field of diesel technology can choose between a variety of employment opportunities, including diesel engine technicians, heavy duty technicians, fuel system specialists, diesel service managers, and manufacturer technicians.

Depending on the degree level, previous work experience, and company location, diesel mechanics can expect to get paid a [mean annual salary](#) of \$40,850, averaging out to \$19.64 per hour.

According to the [BLS](#), individuals seeking a higher paying position may find employment opportunities in the top five paying states.

- [Hawaii](#): \$58,420 with an hourly mean wage of \$28.09
- [Alaska](#): \$55,910 with an hourly mean wage of \$26.88
- [Wyoming](#): \$54,710 with an hourly mean wage of \$26.31
- [Nevada](#): \$53,360 with an hourly mean wage of \$25.65
- [Connecticut](#): \$52,490 with an hourly mean wage of \$25.23

Choosing a career in diesel technology will open many new career opportunities for individuals across the nation.

If you are searching for an accredited diesel technology program, take a minute or two to research potential accredited colleges near you.

Source:

<https://dieselmechanicguide.com/demand-diesel-mechanics-popular-states/>

## 2 Curriculum

### 1 Program Parallels

Describe how program content parallels current thinking/trends in the field/trade. Please provide two sources of documentation showing how the program content parallels current thinking/trends in the field/trade. Example: Journal articles, professional publications, national trend data.

### Response

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**The diesel department is fortunate enough to have advanced engines and equipment. We have a 2018 CAT loader, 2014 6.7 L Cummins, 2017 W900 Kenworth, just to list a few.**

**All three of the pieces of equipment listed above have Common Rail Fuel Systems and EGR systems. The loader and the Kenworth have SCR systems.**

**These systems are covered in depth to give the students who are entering the mechanic field the knowledge that they need to begin work. They will have a good understanding of these advanced systems that they will encounter when the break out in the field.**

### Fuel Systems and Fuel Treatments

Along with the aforementioned advancements in diesel engine technology, there have been extensive advancements with regard to fuel systems and treatments; for instance, the **Common Rail Fuel system, which was designed for direct fuel injection and works in conjunction with fully electronic fuel injectors.** Ultimately, this advanced form of fuel injection transfers diesel from the fuel tank to the various valves, while maintaining the highest pressure to homogenize diesel fuel and oxygen as the mixture vaporizes. This process also comes with greater control, power output, and fewer fuel emissions. Additional advancements to this form of fuel injection have introduced methods of using upwards of five fuel injections for each combustion cycle, further increasing fuel efficiency.

Source:

<https://www.wpowerproducts.com/news/advancements-in-diesel-generator-sets-and-diesel-engines/>

### Diesel Fuel Emission Treatments

As mentioned earlier, **Exhaust Gas Recirculation (EGR) and Selective Catalytic Reduction (SCR)** are the most recent advancements in fuel emission treatments. The combustion of diesel fuel happens at extremely high temperatures in which NO<sub>x</sub> is produced. Such emissions can be extremely hazardous to the environment, which is where the EGR system comes into play. In

essence, it is implemented to treat and subsequently lower such emissions being released into the atmosphere. This significant reduction is accomplished by directly recirculating NOx back into the combustion chamber. In the end, the temperature is then lowered, thus reducing the formation of further NOx.

Also previously mentioned, SCR is used as a method of converting NOx so that it is not as harmful to the atmosphere. Long used in commercial businesses, the SCR process is now being implemented with diesel engines and generators, reducing fuel emissions by as much as 95 percent and receiving praise as an environmental improvement.

Source:

<https://www.wpowerproducts.com/news/advancements-in-diesel-generator-sets-and-diesel-engines/>

## 2 Degree Requirements

Approved degree requirements. Insert the approved current degree requirements for the program and/or where program courses are used to fill General Education requirements.

### Response

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## Diesel Technology, A.A.S.

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The Diesel Technology program provides an opportunity for students to learn techniques and develop skills necessary for them to acquire a job or to advance in a job as a diesel/ heavy equipment technician or a related field. This program is intended to give students basic knowledge with actual hand-on activities. Helping students understand how to apply theory to an actual on-the-job situation and helping them gain the confidence to take on larger and more complex tasks and be successful are important to the mission of the Diesel Technology program. The program also strives to partner with the community to meet the needs of local business and industry. Specialized training is developed on request and as time permits, in order to help employees improve their skills.

## Degree Requirements

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### Freshman Year - Fall Semester

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- [AUTO 1765 - Automotive Electrical Systems I](#) Credits: 3
- [AUTO 1766 - Automotive Electrical Systems II](#) Credits: 3
- [AUTO 1770 - Automotive Electronics](#) Credits: 3
- [DESL 1595 - Diesel Fundamentals](#) Credits: 3
- [INDM 1570 - Industrial Hydraulics I \(Fluid Power\)](#) Credits: 3
- [HMDV 1005 - 1st Year Success](#) Credits: 1

**Subtotal: 16**

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### Freshman Year - Spring Semester

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- DESL 1600 - Diesel Engines Credits: 6
  - DESL 1625 - Diesel Engine Management I Credits: 3
  - INDM 1580 - Industrial Hydraulics II (Fluid Power) Credits: 3
  - INDM 1585 - Industrial Hydraulics III Credits: 3
  - ENGL 1010 - English Composition I Credits: 3

**Subtotal: 18**

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Freshman Year - Spring Semester Notes:

- In addition to ENGL 1010, students may be required to also take ENGL 1011(2 credits) due to placement, adding 2 additional credits to their graduation total.

**Sophomore Year - Fall Semester**

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- COMM 1030 - Interpersonal Communication Credits: 3
- ENGL 2005 - Writing in Technology and the Sciences Credits: 3
- US & Wyoming Constitution Credits: 3
- CMAP 1200 - Computer Information Systems Credits: 3
- DESL 1635 - Diesel Engine Management II Credits: 3
- WELD 1755 - Shielded Metal Arc Welding Credits: 3

**Subtotal: 18**

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Sophomore Year - Fall Semester Notes:

- US & Wyoming Constitution can be fulfilled by U.S. to 1865 (HIST 1211), U.S. From 1865 (HIST 1221), Wyoming History (HIST 1251) or American & Wyoming Government (POLS 1000)
- ENGL 2005 may be replaced by ENGL 1020.

**Sophomore Year - Spring Semester**

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- AUTO 1760 - Heating and Air Conditioning Credits: 3
- MATH 1000 or PHYS 1050 - Concepts of Physics Credits: 3 or 4

- TECH 1600 - Industrial Safety Credits: 3
- Major Area Courses Credits: 6

**Subtotal: 17**

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- Major Area Courses can be fulfilled with any directly related course from the following prefixes: AUTO, CMPT, DESL, ELTR, INDM, MCH, MINE, OGPT, TECH, or WELD.

Subtotal: 69

**Total Credit Hours: 69**

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All courses in the Technology and Industry Prefixes (AUTO, DESL, INDM, TECH, and WELD) must be completed with a “C” or better to earn the Diesel and Heavy Equipment Technology degree.

## **Diesel Technology Certificate**

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### **Degree Requirements**

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#### **Required Courses**

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Students must complete the following required courses (30-31 credits)

- AUTO 1760 - Heating and Air Conditioning Credits: 3
- AUTO 1765 - Automotive Electrical Systems I Credits: 3
- AUTO 1766 - Automotive Electrical Systems II Credits: 3
- AUTO 1770 - Automotive Electronics Credits: 3
- DESL 1595 - Diesel Fundamentals Credits: 3
- DESL 1600 - Diesel Engines Credits: 6
- DESL 1625 - Diesel Engine Management I Credits: 3
- DESL 1635 - Diesel Engine Management II Credits: 3
- Approved Directly Related Electives Credits: 3-4

**Subtotal: 30-31**

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Required Course Notes:

- Approved directly related course can be fulfilled by (Math 1000) or any higher MATH course or Concepts of Physics ([PHYS 1050](#)).

### **Additional Credits**

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In addition to the required courses complete a minimum of 5 credits from the following:

- [AFVT 1600 - Light-Duty Diesel Engine Performance I](#) Credits: 3
- [AFVT 1610 - Light-Duty Diesel Engine Performance II](#) Credits: 3
- [DESL 1590 - Heavy Duty Power Trains](#) Credits: 6
- [DESL 1680 - HD Brake & Suspension](#) Credits: 6
- [INDM 1510 - Industrial Mechanics I](#) Credits: 3
- [INDM 1520 - Industrial Mechanics II](#) Credits: 3
- [INDM 1540 - Industrial Mechanics IV](#) Credits: 3
- [INDM 1570 - Industrial Hydraulics I \(Fluid Power\)](#) Credits: 3
- [INDM 1580 - Industrial Hydraulics II \(Fluid Power\)](#) Credits: 3
- [INDM 1585 - Industrial Hydraulics III](#) Credits: 3
- [TTD 1500 - Novice CDL Training](#) Credits: 6

**Subtotal: 5**

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Subtotal: 35-36

**Total Credit Hours: 35-36**

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All above courses must be completed with a “C” or better to earn the Diesel Technology Certificate.



### 3 Faculty

#### 1 Faculty Orientation and Evaluation

Describe the orientation and evaluation processes for faculty, including adjunct faculty and part-time faculty.

#### Response

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The Diesel program uses the Western Wyoming Community College orientation protocol for all new instructors, both full time and adjunct. We also attend meetings before each semester to receive any new or updated information regarding developments or changes in the institution. Trainings are always ongoing as technology demands changes in our program. Our faculty evaluations are done yearly by our division chair on their evaluation reporting form. Evaluations are also available for our students to grade the instructors, and give us some insight on our performance.

#### Faculty Evaluation System

\*New Faculty: Full-Time Faculty on Initial Contract and Adjuncts with fewer than 3 consecutive years of successful instruction, as determined by Western's Annual Evaluation System.

Veteran Faculty: Full-Time Faculty on Continuing Contract and Adjuncts with more than 3 consecutive years of instructions, as determined by Western's Annual Evaluation System.

\*\*Veteran Faculty with 3 years of Annual Evaluations Meeting Expectations or Exceeding Expectations will go on a 4-year Teaching Evaluation rotation, unless something arises indicating a need for an evaluation sooner. Those at the rank of Full Professor will be evaluated on an as needed basis.

Teaching Evaluation Disclaimer: Instructors receiving a "needs improvement" rating will receive a follow-up visit; the higher of the two evaluations will be reported on the Annual Evaluation.

Student Evaluations Disclaimer: Adjunct Faculty and Full-time Faculty on initial contract will have all courses taught evaluated by students. Full-time Faculty on continuing contract will select two courses per semester to be evaluated by students.

#### Responsibilities/Timeline

## Faculty

Each year Division Chairs will use the Annual Faculty Evaluation as a summative tool to assess performance and encourage growth. The evaluation consists of the formative tools: Student Evaluations, Teaching Evaluations, Assigned/Elected Service, and Self-Evaluation. To complete the Annual Faculty Evaluation, faculty will be responsible for administering student evaluations in their classes each semester; reviewing, commenting, and signing the teaching evaluation within one week of the unannounced visit. They will also be responsible for completing Page 1. of the Annual Faculty Evaluation by Graduation Day each year. This includes completing the self-identification information, Student Evaluation, Teaching Evaluation, and Assigned/Elected Service components. During Fall Convocation, faculty will review the Division Chair Summary & Feedback on the Annual Faculty Evaluation, and complete the Faculty Self-Evaluation section. The signed/dated Annual Faculty Evaluation must be submitted to the Division Chair no later than 5:00 pm on the last day of Fall Convocation.

## Division Chair

Each year the Division Chair will complete the Annual Evaluation (see aforementioned breakdown). To do so, the Division Chair will visit faculty classes (live or online) unannounced during the academic year. They will complete the Teaching Evaluation and submit it to the instructor within 48 hours of the visit, unless a Content Evaluation is needed to complete the form. If a Content Evaluation is required, the form will be returned within 48 hours of its completion. During the summer semester, Division Chairs will review Page 1. of the Annual Faculty Evaluation, Student Evaluations as needed, and input the Planning & Improvement Data. They will also complete the Division Chair Summary & Feedback section. The complete form will be submitted to the instructor by the first day of New Faculty In-Service for review. Once the completed evaluation is signed/dated, the Division Chair will sign, date, and submit to the Dean of Academics by September 1st.

## Dean of Academics

Each year the Dean of Academics will review the Annual Evaluation during Fall semester.

## **2 Professional Development**

Describe the professional development opportunities available to faculty and the budgetary resources allocated to professional development.

### **Response**

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#### Professional Development

In our diesel program we have access to \$650 professional development funds for each instructor per year. We can also donate these funds to another instructor if needed. We utilize our professional development account for new training and instruction in our industry. Western Wyoming Community College also provides classes for their faculty and employees to add to their degree, or just to expand their knowledge.

### 3 Faculty Credentials

Complete the Faculty Credentials table with one row for each faculty member.

#### Response

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Faculty Name	Credential	Teaching Experience	Professional Rank	Classification	Department
Charles Murray	BS	6-10 years	1-5 years	Instructor full time	Diesel

## 4 Continuous Improvement

### 1 Assessment Planning




Describe the program assessment planning methodology, and how program and/or student learning outcomes, assessment measures, and benchmarks are selected. Provide three program learning outcomes with their corresponding measures and benchmarks.

### Response

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The Diesel and Heavy Equipment department has had discussions with our advisory committee about the goals of this department and what at minimum a student should know when completing each course. The department took the information gathered at the advisory committees and designed the courses to insure that each benchmark is met and measured through specific tests or quizzes.

### Associated Outcomes

-  [24-Perform basic diagnosis](#)
-  [25-Remove and install Powertrain](#)
-  [26-Basic maintenance](#)




## 2 Assessment Reporting

Describe how program assessment data is collected and reported; include program-level collection procedures and findings. Provide between two and five years of assessment findings.

### Response

The Diesel and Heavy Equipment department is in close contact with the advisory committee. We have had many discussions about what the minimum bench marks are for each class. These bench marks are specific skills that the students should possess. For each bench mark I have a quiz or test for the students to insure that we as a department have met our goals. I average each specific bench mark and record them yearly in the Strategic Planning Online program.

### Associated Outcomes

-  [24-Perform basic diagnosis](#)
-  [25-Remove and install Powertrain](#)
-  [26-Basic maintenance](#)

### **3 Use of Assessment Results**

Describe how the program assessment results are used. Cite specific assessment findings and evidence of how the findings are used. Provide two to five specific examples demonstrating how assessment results have been used to make programmatic decisions.

#### **Response**

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The Diesel department uses the assessment results to help the students obtain a job before or after graduation. More often than not, the students that possess at least the minimum skills that are laid out by this department are hired by one of the employers/ participants of the advisory committee. I have had positive feedback for more than one of my students from the employers. Wyoming Machinery Company, Tri-State Truck and Equipment, and Kenworth have all given this department positive feedback with extensive discussion about any improvements that might need to be made for future employment.

#### **4 Assessment Reflection**

Provide an overall assessment summary, and three ideas about how future assessments will be improved.

#### **Response**

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The Diesel department has and will continue to be in close contact with our advisory committee. The benchmarks that this department and the advisory committee have decided were essential have helped many students obtain long term employment. We will continue to improve the assessments by having discussions with the advisory committee, evaluating each benchmark individually, and take student evaluations into consideration.



## 5 Evidence

### 1 Data to Support Decision Making

What data does the program use to support decision-making? Give examples of the data used and cite specific decisions where applicable. Provide two to three examples of data-informed program decisions, each example should include specific relevant data and an explanation of how the data was used to inform decision-making.

### Response

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The diesel department conducts two advisory council meetings per year to align the diesel department with industry needs. The advisory council consists of professional truck shops, professional equipment shops, mine supervisors and various local construction companies. We as a group discuss different needs of the industry concerning new employment and the knowledge that we believe a beginning mechanic should possess and I accommodate their needs as much as possible.

The advisory council and I discussed the importance of rebuilding a manual Eaton transmission. I asked the council if this is a common task or needed knowledge. The Council as a whole agreed that in the industry, rebuilding transmissions is only in specialty shops and is not an expected requirement for employment. I have since removed the rebuilding of the Eaton transmissions from my curriculum.

I wanted to build a heavy equipment class that covered track removal, blocking and cribbing of machines as well as removal and inspection of tracked and wheeled vehicle components. I presented my idea to the advisory council and they all had a positive response and added a couple pointers. ie: the importance of safety. Fall 2021 I implemented DESL 1705 Heavy Equipment Fundamentals.

## **2 Data to Support Program Engagement**

How does the program actively engage other programs for feedback? Provide examples of active engagement and specific feedback received. Provide two to three specific examples citing program engagement with other programs, each example should include feedback from the other programs.

### **Response**

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Our School of Manufacturing and Industry Technology division instructors are also a part of our Advisory Council meetings. Any concerns from these programs are addressed and implemented to our course work, if possible.

The Welding instructors and the diesel department have had discussions about how we can better serve each other. One of these ideas is to have specific welding class more geared toward mechanics (e.g., mig welding). The welding department is in the process of designing a class or series of classes to help accommodate our goals.

The Automotive mechanics instructor instructs three electrical classes that are requirements to obtain a degree in the diesel department.

Also the Mine Maintenance program uses our Diesel fundamentals class as part of the requirements for their degree. We work hand in hand with most of our division for the benefit of our students and our industry.

## 6 Planning for the Future

### 1 Program Mission Statement

A Mission Statement should briefly describe the program. The program mission statement should closely align with the college mission statement.

### Response

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Keep your passion moving with heavy trucks and equipment.

## **2 Program Vision Statement**

A Vision Statement should briefly describe program aspirations for the future.

### **Response**

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We aspire to teach, train and hone the skills in our trade to the highest levels possible, so our students can excel in their field. We plan the same for the future, with the exception of new advances in technology and industry requirements.

### **3 Planning Philosophy**

Describe the philosophy that guides future program planning. Provide descriptions of decision points and evidence used in the program planning process.

#### **Response**

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The diesel advisory committee guides the future of our program by keeping us up to date with the needs of the industry.

One concern of our industry partners is time management and attendance. We have sense implemented a attendance policy and a tardy policy. This helps us to track the students attendance to better inform industry when giving recommendations for job placement.

#### **4 Demonstration of Planning**

Provide specific examples of how your program planning philosophy informs the development/implementation of a plan. Provide two to three specific examples of how the program philosophy informs the development and implementation of program plans.

#### **Response**

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Our biggest influence on getting our students employed is our partnership with local industry. Through our advisory council, we receive input on what is needed from our program, then implemented to our course studies.

The industry partners asked if we focus more on electronics and electrical troubleshooting. I have now reorganized two of my classes (DESL 1625 and DESL1635) in order to provide the training that industry has asked of us.

Another industry partner asked if we could have a class more machine based and not heavy truck. fall of 2021 we started a heavy equipment fundamentals class. DESL1705

## 7 Strengths and Limitations

### 1 Strengths

Clearly describe three of the program's strengths.

### Response

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The diesel program has great industry support and open communication throughout.

We provide an abundance of hands on experience with equipment and engines that the students will encounter once employed.

We work very closely with the welding department and the automotive department to insure the students acquire a more informed education. We believe this is important in order to allow the student to be more prepared for what a mechanic shop will require.

## **2 Limitations**

Clearly describe three of the program's limitations.

### **Response**

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One limitation our program faces is keeping up with technology. The advances in technology happen so quickly that it becomes a problem to purchase up to date equipment, trucks, and engines.

Our shop is relatively small to accommodate two large classes at the same time.

Recruiting in southwest Wyoming is a challenge because of how rural the area is.



### **3 Aspirational Program**

Identify a similar program at another institution as an aspirational point. Describe why this program was selected and why it is considered an aspirational reference point.

#### **Response**

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Gillette College has a high admission rate with the diesel program, large up to date shop, with great tooling for their students.

We selected this college because we recently participated in the state Skills USA competition where we were able to tour the facility and speak with all of the instructors.

## 8 Resource Adequacy

### 1 Human Resources

Identify and evaluate the adequacy, availability, and sustainability of program human resources.

#### Response

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At our current class enrollment levels, the program meets the adequacy, availability, and sustainability of the programs demand. The current instructor is covering the enrolled students. Classes are usually available 8:00am to 10:50pm and 1:00pm to 3:50pm Monday thru Thursday. The current instructor has excellent experience in Industry and remains up to date with advisory council input and training.

## **2 Information Technology Resources**

Identify and evaluate the adequacy, availability, and sustainability of program information technology resources.

### **Response**

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Currently the Diesel Technology program utilize primarily Perkins grant and other grants that become available to address funding which directly ties to the adequacy, availability and sustainability of the program information technology resources. The program is not aware of any changes that is going to occur to this funding. As long as funding is available at the current level, the program information P a g e | 17 technology resources will be at an acceptable level. With the current financial situation for the state of Wyoming, the program does not see an increase in funding in the near future. With additional funding the program could expand the adequacy and availability of the programs information technology resources.

### **3 Physical Resources**

Identify and evaluate the adequacy, availability, and sustainability of program physical resources.

#### **Response**

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Currently the Diesel Technology program utilize primarily Perkins grant, materials budget, student fees and industry donations to maintain the physical resources for the program. The program may have to increase student fees to keep up with increase in consumable costs. With the current financial situation for the state of Wyoming, the program does not see an increase in funding in the near future. With additional funding the program could expand the programs physical resources

#### **4 Financial Resources**

Identify and evaluate the adequacy, availability, and sustainability of program financial resources.

#### **Response**

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Perkins grant funding has remained consistent over the last five years. However, budget funding has gone down and forced the program to rely more on material conservation to maintain the programs.

Student fees are evaluated on a yearly basis and raised as necessary to help offset program cost. However, it is not possible to raise student fees to cover equipment, only consumables.

## 9 Organizational Impact

### 1 Positive Impact

Describe ways that the program has a positive impact on the institution.

### Response

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Most of the students in the diesel program are seeking employment within industry. Most of the industry would like to see a student graduate with an associates degree to insure the student, at minimum, can do basic math and has the ability to communicate competently.

We encourage and facilitate the students to earn a A.A.S. degree.

## **2 Functional Improvements**

Describe a substantive change the program may undergo in the next two years to enhance the success of the institution.

### **Response**

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We are currently in the process of purchasing a new mid size excavator. We are planning on updating some engines and hopefully adding a semi trailer to the fleet of trucks we currently have.

