

# Assessment Report

## PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information:		
<u>2019-2020</u>	<u>Eric Worthen</u>	<u>eworthen@cnm.edu</u>
<b>Academic Year</b>	<b>Contact Person</b>	<b>Email</b>

Name of Program:	Courses:																																																															
Diesel Equipment Technology Certificate	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>DETC 1111</td><td>DETC 1121</td><td>DETC 1131</td><td>DETC 1141</td><td>DETC 1151</td><td>DETC 1192</td><td>DETC 1193</td> </tr> <tr> <td>DETC 1211</td><td>DETC 1221</td><td>DETC 1225</td><td>DETC 1231</td><td>DETC 1241</td><td>DETC 1250</td><td>DETC 1292</td> </tr> <tr> <td>DETC 1293</td><td>DETC 1392</td><td>DETC 1393</td><td>DETC 1492</td><td>DETC 1493</td><td>DETC 1592</td><td>DETC 1593</td> </tr> <tr> <td>DETC 2111</td><td>DETC 2121</td><td>DETC 2131</td><td>DETC 2135</td><td>DETC 2194</td><td>DETC 2198</td><td>DETC 2294</td> </tr> <tr> <td>DETC 2297</td><td>DETC 2394</td><td>DETC 2494</td><td>DETC 1111</td><td>DETC 1121</td><td>DETC 1131</td><td>DETC 1141</td> </tr> <tr> <td>DETC 1151</td><td>DETC 1192</td><td>DETC 1193</td><td>DETC 1211</td><td>DETC 1221</td><td>DETC 1225</td><td>DETC 1231</td> </tr> <tr> <td>DETC 1241</td><td>DETC 1250</td><td>DETC 1292</td><td>DETC 1293</td><td>DETC 1392</td><td>DETC 1393</td><td>DETC 1492</td> </tr> <tr> <td>DETC 1493</td><td>DETC 1592</td><td>DETC 1593</td><td>DETC 2111</td><td>DETC 2121</td><td>DETC 2131</td><td>DETC 2135</td> </tr> <tr> <td>DETC 2194</td><td>DETC 2198</td><td>DETC 2294</td><td>DETC 2297</td><td>DETC 2394</td><td>DETC 2494</td><td></td> </tr> </table>	DETC 1111	DETC 1121	DETC 1131	DETC 1141	DETC 1151	DETC 1192	DETC 1193	DETC 1211	DETC 1221	DETC 1225	DETC 1231	DETC 1241	DETC 1250	DETC 1292	DETC 1293	DETC 1392	DETC 1393	DETC 1492	DETC 1493	DETC 1592	DETC 1593	DETC 2111	DETC 2121	DETC 2131	DETC 2135	DETC 2194	DETC 2198	DETC 2294	DETC 2297	DETC 2394	DETC 2494	DETC 1111	DETC 1121	DETC 1131	DETC 1141	DETC 1151	DETC 1192	DETC 1193	DETC 1211	DETC 1221	DETC 1225	DETC 1231	DETC 1241	DETC 1250	DETC 1292	DETC 1293	DETC 1392	DETC 1393	DETC 1492	DETC 1493	DETC 1592	DETC 1593	DETC 2111	DETC 2121	DETC 2131	DETC 2135	DETC 2194	DETC 2198	DETC 2294	DETC 2297	DETC 2394	DETC 2494	
DETC 1111	DETC 1121	DETC 1131	DETC 1141	DETC 1151	DETC 1192	DETC 1193																																																										
DETC 1211	DETC 1221	DETC 1225	DETC 1231	DETC 1241	DETC 1250	DETC 1292																																																										
DETC 1293	DETC 1392	DETC 1393	DETC 1492	DETC 1493	DETC 1592	DETC 1593																																																										
DETC 2111	DETC 2121	DETC 2131	DETC 2135	DETC 2194	DETC 2198	DETC 2294																																																										
DETC 2297	DETC 2394	DETC 2494	DETC 1111	DETC 1121	DETC 1131	DETC 1141																																																										
DETC 1151	DETC 1192	DETC 1193	DETC 1211	DETC 1221	DETC 1225	DETC 1231																																																										
DETC 1241	DETC 1250	DETC 1292	DETC 1293	DETC 1392	DETC 1393	DETC 1492																																																										
DETC 1493	DETC 1592	DETC 1593	DETC 2111	DETC 2121	DETC 2131	DETC 2135																																																										
DETC 2194	DETC 2198	DETC 2294	DETC 2297	DETC 2394	DETC 2494																																																											

## PART 2: PROGRAM SUMMARY

Provide a high-level review of the program to include highlights, successes, challenges, significant changes, and significant resources needed to support the program.
<p>Over the last year the Covid-19 pandemic provided several obstacles for the program. The loss of several months of in person learning contributed to a high rate of student attrition. Many of the students struggled with the rapid transition to online only instruction. The program will benefit from the return to in person learning moving into the next cohort of students in the spring of 2021.</p> <p>A new full-time instructor was brought on board beginning in the fall term.</p>

**Part 3: DATA REVIEW**

<b>Program Data</b> <b>(Each Review Year is defined as Summer, Fall, and Spring terms)</b>	<b>Review Year</b> <b>19-20</b>	<b>Review Year</b> <b>18-19</b>	<b>Review Year</b> <b>17-18</b>
Annual number of graduate awards is greater than 10	23	29	20
Number of declared majors	54	73	73
Average class size	13	13	13
Annual Average class retention rate is 70% or above (SAGE 65%)	96%	100%	100%
Annual C-Pass rate for coursework is 60% or above	87%	97%	98%
Average class fill rate at 60% or above capacity within a term or over a year	65%	61%	67%
Transfer numbers/percent	NA	0 (0%)	0 (0%)
Full-time to part-time faculty ratio	44: 0	50: 0	69: 1

Summarize how your program met or did not meet the target measures based on the data above.

The 2019-2020 year produced 23 graduates with an annual class retention rate of 96%. The annual C-pass rate was 87% with a goal of 60% or above. The average class fill rate was 65% with a goal of 60%. All targets were met for the 2019-2020 review year.

**Part 4: PROGRAM LEARNING OUTCOME ANALYSIS.**

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
1. Diagnose and repair vehicle mechanical, electrical, and computer-managed systems.	All program courses	Test or quiz, Practical exam, and In-class activities.	An 85% pass rate was achieved in the M/HD electronic systems course. All passing students were required to show proficiency in using digital multimeters and advanced diagnostic procedures.

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
2. Show proficiency in the language arts, communications, science, and math skills required in the automotive service industry.	DETC 2121 and DETC 2198	External evaluator, and Instructor observation.	Students will be evaluated in their ability to prepare a resume and cover letter prior to their internship. Feedback from their supervisor will be evaluated and recorded during the students 40-hour internship. Recordable metrics for the 2020 graduating class have not yet been evaluated due to COVID-19 schedule restructuring.
3. Apply critical thinking skills to solve workplace problems.	DETC 2194	Test or quiz, In-class activities, and Instructor observation.	Students will be evaluated in their ability to perform DOT inspections and perform preventative maintenance in all areas of diesel equipment technology. Recordable metrics for the 2020 graduating class have not yet been evaluated due to COVID-19 schedule restructuring.

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
<p>4. Work safely and in an environmentally responsible manner.</p>	<p>DETC 1131</p>	<p>In-class activities, and Instructor observation.</p>	<p>Students have been trained and evaluated in work safety and environmental awareness. A random student has been required to give a "morning safety talk" at the start of each class to discuss a safety topic for the day. Over the course of all lab activities the use of PPE and safe work practices is monitored and evaluated. Students have been trained in the proper disposal of used oil and coolant. Frequent disposal of used oil has been performed over the course of the lab courses. Lock-out tag-out training has been added to the core curriculum of DETC 1592.</p>

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
5. Perform basic word processing and computer database searches for repair information.	DETC 2198	In-class activities, and Homework assignments.	Students will be evaluated based on their ability to produce a resume and cover letter prior to beginning their 40-hour internship. Over the course of their internship, they will be evaluated on their ability to use service information systems to perform required tasks and access needed repair information. Recordable metrics for the 2020 graduating class have not yet been evaluated due to COVID-19 schedule restructuring.

Interpretation of Assessment findings
<p>The restructuring of classes due to the Covid-19 pandemic has pushed back the availability of many the recordable metrics used to assess learning outcomes. All data that has been collected shows that goals and measurable criteria have been met. A reassessment of data after the 2020 graduating class completes DETC 2198, 2194, 2294 and 2394 would be useful in making a more complete overall assessment.</p>

**Part 6: ADDITIONAL ACTION PLAN IN SUPPORT OF STUDENT LEARNING (IF APPROPRIATE)**

Upcoming year	Changes planned for the upcoming year	Data motivating this change
2020-2021	Gloves will become required PPE in the DETC lab in early 2021.	Industry standards are trending towards 100% glove usage policy. Minor hand injuries will be prevented, and the students will be better prepared for policies that are being adopted in many workplaces.
2020-2021	Web based theory courses will be taught in parallel with hands on lab instruction.	The rapid change to instructional needs during the Covid-19 pandemic highlighted the need for theory and lab courses to be held in parallel with one another. Many theory topics need reinforcement through hands on learning that can be best be conveyed while the theory portion of the course is still being studied.
2020-2021		

**Please Select all the following that characterize the types of changes described in the above action plan:**

- Assessment criteria revision       Assessment methodology revision       Assignment revision
- Budgetary reallocation       Change in teaching approach       Course content revision
- Curricular Revision       Faculty training/development       Process revision

**Part 6: COMMENTS**

**Use this section to record any comments, notes, or questions from individuals who reviewed this report.**

School Dean:
--------------

SAAC Representative:
----------------------