



Cycle: 2018-2021

ASSOCIATE IN APPLIED SCIENCE WITH A MAJOR IN AUTOMOTIVE TECHNOLOGY—DIESEL OPTION

Program Mission Statement:

This program trains technicians to diagnose, service and maintain both gasoline and diesel vehicles. Employment opportunities are available in the automotive or trucking industries and their related fields.

Division: Technical and General Education

AVP: Dan Averette

Department Chair: Keith McKenzie

Director:

SACSCOC Standard: 8.2A

Accrediting Agency: Yes No

Name:

Certification Exam(s): Yes No

Agency Name:

Credential:

Program Student Learning Outcome	Monitoring Year
Demonstrate knowledge of safety and environmental requirements in the transportation repair industry.	2018
Differentiate engine system’s components.	2019,2020
Demonstrate proficiency in the servicing of automotive brake systems.	2019
Demonstrate understanding of air brake systems.	2020
Demonstrate understanding of preventive maintenance.	2020

STUDENT LEARNING OUTCOMES FOR AAS.AUD – 2018-2019

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Demonstrate knowledge of safety and environmental requirements in the transportation repair industry.	AUT 112	Safety Assessment	100% of students will complete a safety assessment with a passing score of 80%	Fall 2018	22 out of 22 (100%) of students earned 80% or better on the safety assessment. The class average was 93%.	The expected learning level was met. Safety and Environmental Requirements will continue to be taught in the fall with an assessment to identify and locate selected safety equipment associated with the laboratories

STUDENT LEARNING OUTCOMES FOR AAS.AUD -- 2019-2020

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Differentiate engine system's components.	AUT 103	AUT 103-Fnal Exam	AUT 103- 85% of students are expected to score 70% or better on the Final Exam.	Spring 2020	In AUT 103, 18 out of 20 (90%) of students scored a 70% or better on the final exam. The class average was 87%.	The expected learning level was met. In AUT 103, 90% of students scored 70% or better on the final exam.
	AUT 102	AUT 102-Final Exam	70% of students will score a 70% or better on the final exam.	Spring 2020	In AUT 102, 11 out of 16 (68.75%) of students scored a 70% or better. The class average was 78%.	The expected outcome was not met. In AUT 102, only 68.75% of students scored a 70% or better. During the next course offering of AUT 102, students will be given an additional lab to help them practice the engine system diagnostic procedures. This will give an additional evaluation and remediation before the final exam.

STUDENT LEARNING OUTCOMES FOR AAS.AUD—2019-2020

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Demonstrate proficiency in the servicing of automotive brake systems.	AUT 112	Final Exam	70% of students given the final will score 70% or better on the assessment.	Fall 2019	In AUT 112, 16 out of 19 (84%) of students scored a 70% or better on the written and hands-on combined final exam. The class average was 80%.	The expected learning level was met, students will be given instructions and labs in AUT 112 to continue ensuring their success in demonstrating proficiency in the servicing of automotive brakes.

STUDENT LEARNING OUTCOMES FOR AAS.AUD—2020-2021

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Demonstrate understanding of air brake systems.	DHM 255	Final Exam	70% of the students will score 70% or better on the Exam.	Spring 2021	15 out of 17 (88%) of students scored 70% or better on the Exam. The class average was 87%.	The expected learning level was met. Air Brake Requirements will continue to be taught, and faculty will consider a hands-on portion to this exam.

STUDENT LEARNING OUTCOMES FOR AAS.AUD—2020-2021

A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Demonstrate understanding of preventive maintenance.	DHM 107	Final Exam	70% of students will score 70% or better on the exam.	Fall 2020	16 out of 18 (89%) of students scored a 70% or better on the final exam. The class average was 78%.	The expected learning level was met. Preventive maintenance will continue to be taught in this course, and faculty will consider a hands-on portion to this exam.

STUDENT LEARNING OUTCOMES FOR AAS.AUD—2020-2021

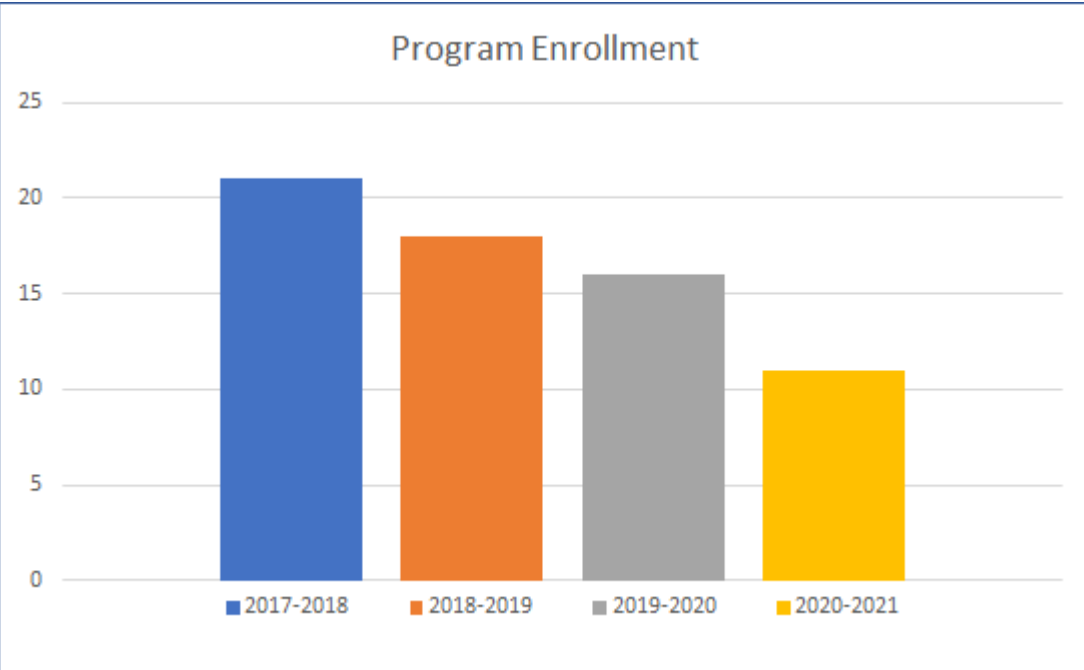
A. Program Student Learning Outcomes	B. What courses are PSLOs Assessed	C. Methods for Outcomes Assessment	D. Expected Level of Program Performance	E. Data Collection	F. Results	G. Plan For Improvement
What should the graduates of your program be able to do?	Where do you see evidence that the student can do these things?	How does your program evaluate student/graduate skills/abilities?	What is the expected level of student performance <u>for the program</u> ?	When will you collect the data needed to evaluate the performance of the program?	What are the results of the evaluation? NOTE: include student ratio with all results.	How will you use this information to improve the program
Differentiate engine system's components.	102	Final Exam	70% of students will score a 70% or higher on the exam.	Spring 2021	13 out of 16 (81%) students scored a 70% or better on the exam. The class average was 79%.	The expected learning outcome was met. The introduction of the added time to this class showed a 12% increase in the number of students meeting this objective. Even with this improvement the class average only advanced 1%. Students will continue to be taught engine system's components.

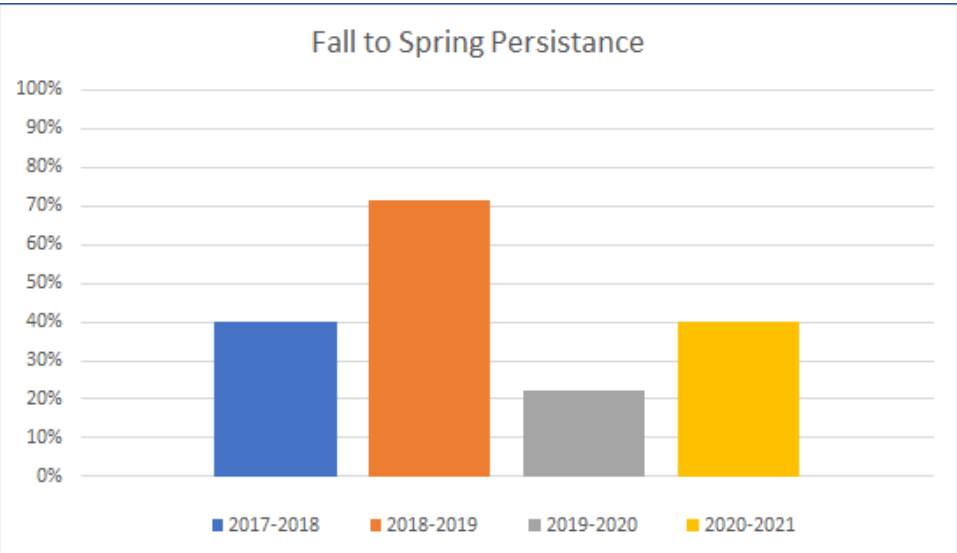
CONTINUOUS STUDENT IMPROVEMENT

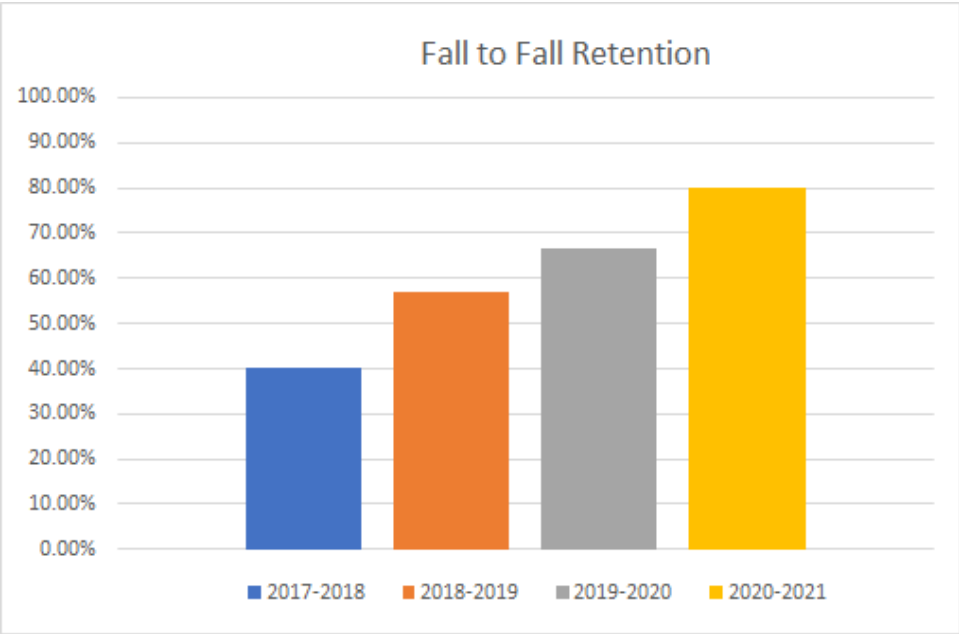
The Automotive Technology with a Diesel Option program has begun to implement plans to improve the program after reviewing data from the last cycle. Faculty have reviewed learning outcomes and addressed areas to adjust as needed. There are lab projects that are going to be re-sequenced to help facilitate content delivery. The faculty plan to add several additional assessments to give students an opportunity of remediation on the content that is challenging for students. In AUT 131, plans are to rearrange the lab on fault finding. The plan allows students to create faults of their own in the lab on the trainers. The purpose is to allow students to then explain their individual circuit faults to the instructors and class. In DHM 107, the faculty discussed allowing the students to quiz each other on the inspection procedures while working on lab vehicles.

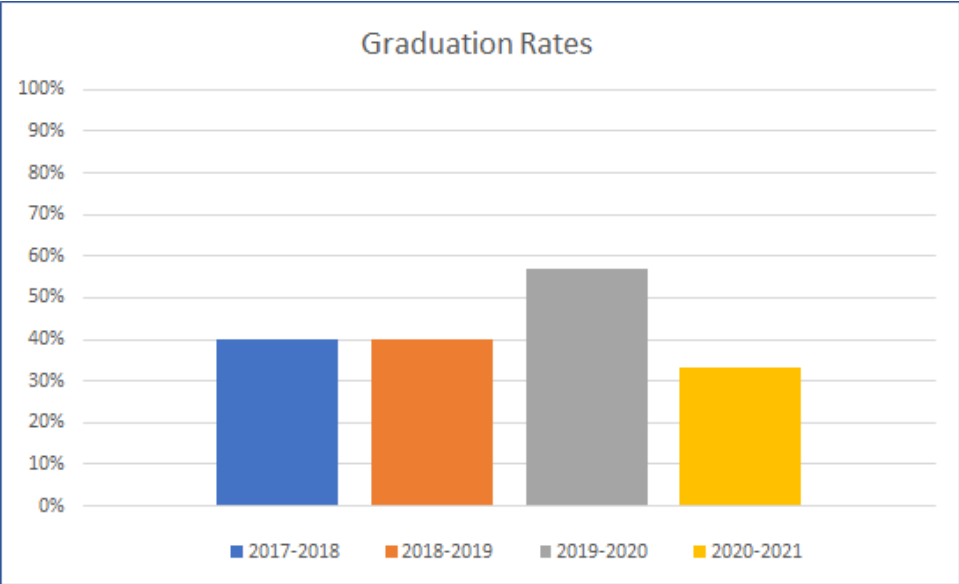
After this cycle, faculty have a better understanding of the goals of the program. Advisors are more keenly aware of helping students firm up their expectations for an individual class and the overall pursuit of objectives of the program. COVID-19 has clearly affected many categories of comparison, but as higher education recovers from the pandemic we hope to see additional improvements.

PROGRAM VITAL STATISCS

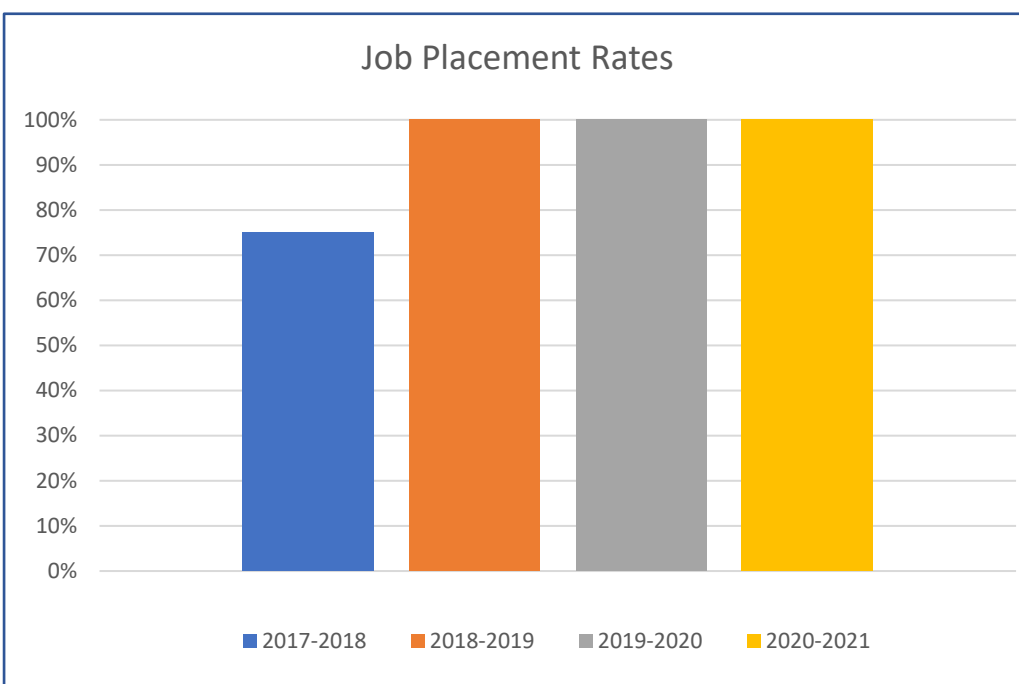
Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Program Enrollment</p>  <table border="1" data-bbox="113 155 1190 821"> <caption>Program Enrollment Data</caption> <thead> <tr> <th>Year</th> <th>Enrollment</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>21</td> </tr> <tr> <td>2018-2019</td> <td>18</td> </tr> <tr> <td>2019-2020</td> <td>16</td> </tr> <tr> <td>2020-2021</td> <td>11</td> </tr> </tbody> </table>	Year	Enrollment	2017-2018	21	2018-2019	18	2019-2020	16	2020-2021	11	<p>Program Enrollment is trending downward with the College's trend. Faculty and students in the department have discussed that there is a national trend of less students graduating high school. It was also discussed that there has been an uptick in unskilled jobs available for students to go to work who would normally come to Automotive. Also, this past year with COVID-19 has greatly impacted numbers through lack of recruitment opportunities.</p>	<p>Faculty and advisors plan to attend and host recruitment activities. Area high schools have begun contact the department about coming out to their upcoming career exploration events. The diesel and automotive instructors are instructed to actively find ways to get area businesses into the respective labs and interact with the students to build momentum. Automotive has already had one Meet and Greet to help with this effort. There are plans to get some of the area businesses and program alumni together to help the department host open house events.</p>
Year	Enrollment											
2017-2018	21											
2018-2019	18											
2019-2020	16											
2020-2021	11											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Fall to Spring Persistence</p>  <table border="1" data-bbox="178 178 1129 727"> <caption>Fall to Spring Persistence Data</caption> <thead> <tr> <th>Academic Year</th> <th>Persistence Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>40%</td> </tr> <tr> <td>2018-2019</td> <td>70%</td> </tr> <tr> <td>2019-2020</td> <td>22%</td> </tr> <tr> <td>2020-2021</td> <td>40%</td> </tr> </tbody> </table>	Academic Year	Persistence Rate	2017-2018	40%	2018-2019	70%	2019-2020	22%	2020-2021	40%	<p>According to the College's numbers, there is somewhat of an anomaly between Fall to Spring and Fall to Fall numbers. In discussion, the faculty noted that this program is outline as a three-year program. Students take classes in the Automotive Technology and Diesel and Heavy Equipment disciplines. Students are encouraged to start in automotive and finish in the diesel area. It is thought that somehow this layout is affecting these numbers.</p>	<p>The faculty and advisors have discussed that this student population needs to have a clear objective of what they are trying to accomplish. More specific questions about the individual's goal will be asked when advising these students. Also, as mentioned, the faculty will be looking at ways to get more area industry representatives into the labs each semester. It has been brought up that since these students have classes in automotive and diesel that these interactions may help sway the student to choose one area over the other depending on how their goals change. The faculty will be mindful and hope to continue to foster the student initial goal of wanting the diesel and automotive training that allows them to have more opportunities in their future.</p>
Academic Year	Persistence Rate											
2017-2018	40%											
2018-2019	70%											
2019-2020	22%											
2020-2021	40%											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Fall to Fall Retention</p>  <table border="1" data-bbox="176 168 1129 797"> <caption>Fall to Fall Retention Data</caption> <thead> <tr> <th>Year</th> <th>Retention Percentage</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>40.00%</td> </tr> <tr> <td>2018-2019</td> <td>57.00%</td> </tr> <tr> <td>2019-2020</td> <td>66.00%</td> </tr> <tr> <td>2020-2021</td> <td>80.00%</td> </tr> </tbody> </table>	Year	Retention Percentage	2017-2018	40.00%	2018-2019	57.00%	2019-2020	66.00%	2020-2021	80.00%	<p>Noting the numbers in the Fall to Spring Persistence, these numbers are more encouraging in the Fall-to-Fall Retention. They are trending up.</p>	<p>Faculty and advisors have discussed the continued need of emphasizing the individual student's goals and ambitions. It was discussed that many times, students have not fully visualized themselves in their chosen field. While advising and conducting labs, the goal of faculty is to help them develop the student's goal and vision.</p>
Year	Retention Percentage											
2017-2018	40.00%											
2018-2019	57.00%											
2019-2020	66.00%											
2020-2021	80.00%											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Graduation Rates</p>  <table border="1" data-bbox="176 180 1129 760"> <caption>Graduation Rates Data</caption> <thead> <tr> <th>Year</th> <th>Graduation Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>40%</td> </tr> <tr> <td>2018-2019</td> <td>40%</td> </tr> <tr> <td>2019-2020</td> <td>58%</td> </tr> <tr> <td>2020-2021</td> <td>33%</td> </tr> </tbody> </table>	Year	Graduation Rate	2017-2018	40%	2018-2019	40%	2019-2020	58%	2020-2021	33%	<p>Graduation Rates have been above the college's average. It did see improvement before COVID-19. The faculty have discussed that it was expecting to continue trending up after we can obtain some level of normalcy.</p>	<p>The overarching theme will be to help students visualize themselves in their chosen field of study. Industry representatives will be invited regularly to interact with the students. When advising, the advisors are asked to help the student think with the end in mind. There are plans to have alumni come back to share with students. This along with interaction with the area representatives will hopefully help students have more concrete expectations for themselves and the program. Another initiative to address graduation rates is having advisors attempt to contact students who have not persisted to completion and now need to return to finish their degree.</p>
Year	Graduation Rate											
2017-2018	40%											
2018-2019	40%											
2019-2020	58%											
2020-2021	33%											

Job Placement Rates



According to the data, Job Placement Rates have been good for the Automotive with Diesel option program. The repair industry has a shortage of technicians and students who want a job are not having any issue finding one.

In order to maintain a good working relationship with the area industry, faculty are encouraged to invite industry representatives into the lab for a visit once a semester. The purpose is to connect students with potential employers. We call these meetings Meet and Greet events.