



Cycle: 2018-2021

ASSOCIATE IN APPLIED SCIENCE WITH A MAJOR IN AUTOMOTIVE TECHNOLOGY

Program Mission Statement:

This program trains automotive technicians to diagnose, service and repair automobiles and light trucks.

Division: Technical and General Education

AVP: Dan Averette

Department Chair: Keith McKenzie

Director:

SACSCOC Standard: 8.2A

Accrediting Agency: Yes No

Name: National Institute for Automotive Service Excellence

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
Demonstrate proficiency in the servicing of automotive brake systems.	2019
Demonstrate proficiency in electrical/electronic fundamentals.	2019
Demonstrate proficiency in steering, suspension and wheel alignment fundamentals.	2019
Differentiate engine system's components.	2019,2020

STUDENT LEARNING OUTCOMES FOR AAS.AUT – 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.AUT – 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 exam 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 additional 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.AUT – 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 electrical/electronic fundamentals.	AUT 131	Final Exam	70% of students will score 70% or better on the exam.	Fall 2019	18 out of 19 (95%) of students scored 70% or better. The class average was 86%.	The expected learning level was met. Electrical fundamentals will continue to be taught and assessed. Students will be allowed to create their own faults for the trainers. In addition, student will explain the faults to the class and how to troubleshoot the given faults.
	AUT 231	Final Exam	80% of students will score 70% or better on the exam.	Summer 2020	10 out of 12 (83%) of students scored 70% or better. The class average was 83%.	The expected learning level was met. Electrical fundamentals will continue to be taught and assessed.

STUDENT LEARNING OUTCOMES FOR AAS.AUT – 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 steering, suspension and wheel alignment fundamentals.	AUT 122	Final Exam	80% of students will score 70% or better on the exam.	Fall 2019	14 out of 15 (93%) students scored 70% or better on the exam. The class average was 84%	The expected learning level was met. Faculty will explore raising the benchmark to 85% of students will score 70% or better on the exam. Students will continue to be given instruction on steering, suspension, and alignment fundamentals.

STUDENT LEARNING OUTCOMES FOR AAS.AUT – 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.	AUT 103 AUT 102	AUT 103-Final Exam AUT 102-Final Exam	AUT 103- 85% of students are expected to score 70% or better on the Final Exam. 70% of students will score a 70% or better on the exam.	Spring 2020 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%. In AUT 102, 11 out of 16 (68.75%) of students scored a 70% or better. The class average was 78%.	The expected learning level was met. In AUT 103, 90% of students scored 70% or better on the final exam. The expected learning level was not met. Therefore, during the next course offering of AUT 102, the faculty will explore simulation or additional labs to help students practice in the mastery of engine system components. This will give an additional evaluation and remediation time before the final exam.

STUDENT LEARNING OUTCOMES FOR AAS.AUT – 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%. Faculty will explore possible simulations and labs which will give students additional time to practice differentiating engine system components.

CONTINUOUS STUDENT IMPROVEMENT

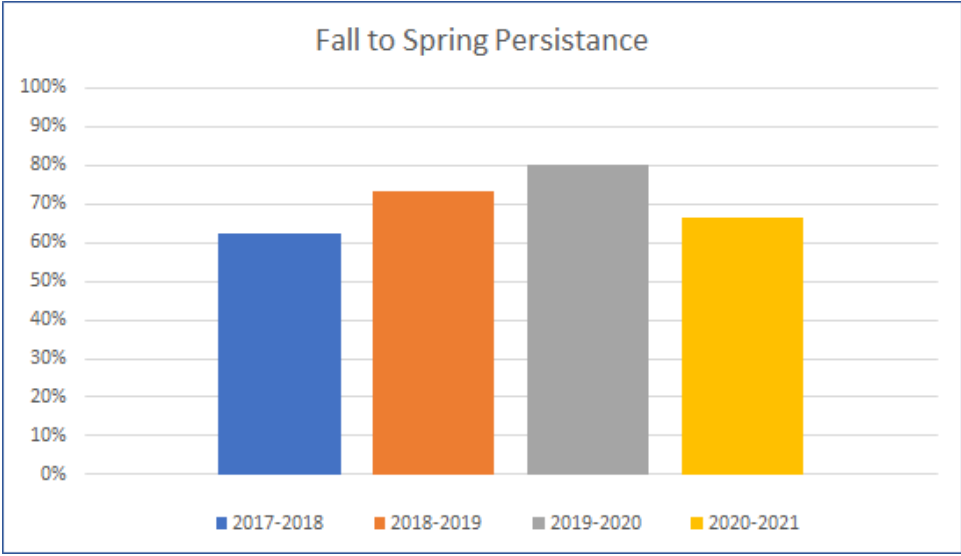
The Automotive Technology Degree program has implemented plans to improve the program and student outcomes after reviewing data from the last cycle. The faculty have reviewed learning outcomes and made adjustments as needed. Some of the lab projects will be re-sequenced to help facilitate content delivery. The faculty also discussed and decided to add a several of additional assessments to give students opportunities for remediation on the content that is most challenging for students. In AUT 131, plans are to rearrange the lab on fault finding. This modification will allow students to create faults of their own in the lab on the trainers. The purpose is to allow students to explain their individual circuit faults to the instructors and class. In AUT 102 there was improvement in the number of students meeting the benchmark from 69% to 81% between the Spring of 2020 and 2021, however, we discussed that there is still room to improve. In addition to the extra lab that was added for 2021, there are plans to add a group activity. These groups will create mini quizzes for the other groups to take.

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 improvements. The College's overall enrollment environment has been trending down throughout this assessment cycle.

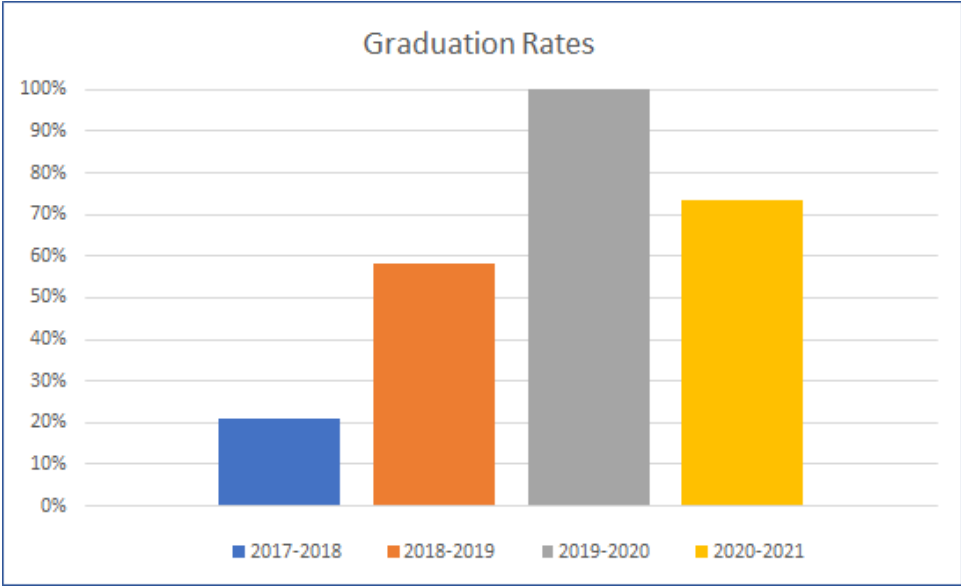
In the area of retention, advisors are being charged with approaching the students from the perspective of starting with the end in mind. Appreciative advising will help advisors guide students to better clarify their objectives and visualize their outcomes. The faculty have plans to bring alumni back into the labs to share their success in the industry with students. The purpose is to help the students visualize their own success.

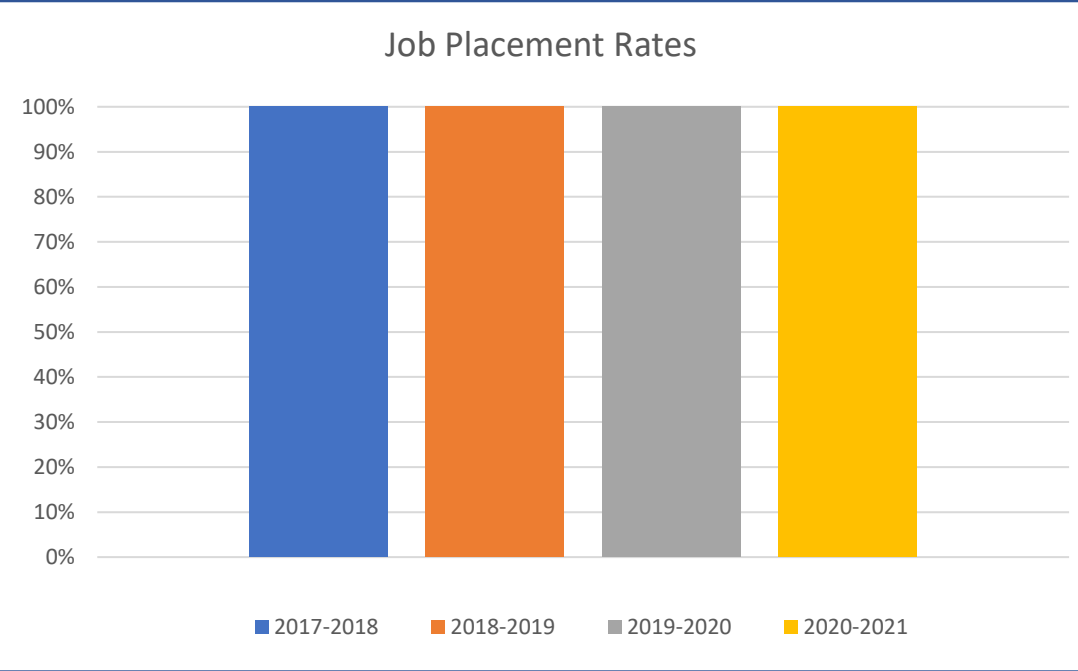
PROGRAM VITAL STATISTICS

Indicator	Trend Analysis	Action Plans										
<div style="text-align: center;"> <p>Program Enrollment</p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th>Year</th> <th>Enrollment</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>46</td> </tr> <tr> <td>2018-2019</td> <td>42</td> </tr> <tr> <td>2019-2020</td> <td>40</td> </tr> <tr> <td>2020-2021</td> <td>27</td> </tr> </tbody> </table> </div>	Year	Enrollment	2017-2018	46	2018-2019	42	2019-2020	40	2020-2021	27	<p>Program enrollment has been on a downward trajectory. This trend is following the college trend. It has been noted that there have been less high school graduates. It appears in our discussion that the biggest impact on this last year is the COVID-19 guidance and concern. This has also made it nearly impossible for recruiting efforts.</p>	<p>Faculty and advisors have already begun receiving invites to career exploration events at area high schools. Plans are being made to host and participate in events that will help connect the program with the prospective students. Part of the plan is to invite area industry representatives and program alumni to come participate in open house events to be hosted by the program.</p>
Year	Enrollment											
2017-2018	46											
2018-2019	42											
2019-2020	40											
2020-2021	27											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Fall to Spring Persistence</p>  <table border="1" data-bbox="163 159 1117 711"> <caption>Fall to Spring Persistence Data</caption> <thead> <tr> <th>Year</th> <th>Persistence Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>62%</td> </tr> <tr> <td>2018-2019</td> <td>73%</td> </tr> <tr> <td>2019-2020</td> <td>80%</td> </tr> <tr> <td>2020-2021</td> <td>67%</td> </tr> </tbody> </table>	Year	Persistence Rate	2017-2018	62%	2018-2019	73%	2019-2020	80%	2020-2021	67%	<p>Fall to Spring Persistence had an upward trend before COVID-19 arrived. It has been discussed that COVID-19 has impacted our efforts. We had an advising effort change over the past few years that appeared to be having a positive impact until COVID-19.</p>	<p>Faculty and advisors plan to continue appreciative advising and help student envision themselves meeting their goals. A new initiative has already begun to help build upon that effort. The program hosted its first Meet and Greet recently. Area industry representatives were invited to come spend an hour with the students in the lab. Students were encouraged to introduce themselves to the visitors and ask them questions as it pertained to their businesses and future opportunities.</p>
Year	Persistence Rate											
2017-2018	62%											
2018-2019	73%											
2019-2020	80%											
2020-2021	67%											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Fall to Fall Retention</p> <table border="1"> <caption>Fall to Fall Retention Data</caption> <thead> <tr> <th>Year</th> <th>Retention Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>50.00%</td> </tr> <tr> <td>2018-2019</td> <td>73.00%</td> </tr> <tr> <td>2019-2020</td> <td>66.00%</td> </tr> <tr> <td>2020-2021</td> <td>55.00%</td> </tr> </tbody> </table>	Year	Retention Rate	2017-2018	50.00%	2018-2019	73.00%	2019-2020	66.00%	2020-2021	55.00%	<p>Fall to Fall Retention has not shown as much promise with our advising efforts as hoped and in comparing to the Fall to Spring Persistence. It is felt that COVID-19 has more of an impact on this trend for this past year.</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 Rate											
2017-2018	50.00%											
2018-2019	73.00%											
2019-2020	66.00%											
2020-2021	55.00%											

Indicator	Trend Analysis	Action Plans										
<p style="text-align: center;">Graduation Rates</p>  <table border="1" data-bbox="163 159 1117 743"> <caption>Graduation Rates Data</caption> <thead> <tr> <th>Year</th> <th>Graduation Rate</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>20%</td> </tr> <tr> <td>2018-2019</td> <td>58%</td> </tr> <tr> <td>2019-2020</td> <td>100%</td> </tr> <tr> <td>2020-2021</td> <td>73%</td> </tr> </tbody> </table>	Year	Graduation Rate	2017-2018	20%	2018-2019	58%	2019-2020	100%	2020-2021	73%	<p>Graduation rates for the Automotive Technology Degree program was trending up until the arrival of the pandemic. The faculty feels that this past year of uncertainty concerning the pandemic has had an impact. There was an advising effort that has been going on at the college and in the department. The faculty felt that this has had a positive effect.</p>	<p>Discussion is to continue appreciative advising and help the student see themselves reaching their goals. The program aspires to meet the students where they are in their ambitions and help build on it with the tasks laid out in the class and lab. Hopes are that a new normalcy can be found now that COVID-19 guidance has begun to relax.</p>
Year	Graduation Rate											
2017-2018	20%											
2018-2019	58%											
2019-2020	100%											
2020-2021	73%											

Indicator	Trend Analysis	Action Plan										
<p style="text-align: center;">Job Placement Rates</p>  <table border="1" data-bbox="115 162 1186 828"> <caption>Job Placement Rates Data</caption> <thead> <tr> <th>Year</th> <th>Rate (%)</th> </tr> </thead> <tbody> <tr> <td>2017-2018</td> <td>100%</td> </tr> <tr> <td>2018-2019</td> <td>100%</td> </tr> <tr> <td>2019-2020</td> <td>100%</td> </tr> <tr> <td>2020-2021</td> <td>100%</td> </tr> </tbody> </table>	Year	Rate (%)	2017-2018	100%	2018-2019	100%	2019-2020	100%	2020-2021	100%	<p>According to the data, Job Placement Rates have been good for the Automotive Technology program. The repair industry has a shortage of technicians and students who want a job are not having any issue finding one.</p>	<p>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.</p>
Year	Rate (%)											
2017-2018	100%											
2018-2019	100%											
2019-2020	100%											
2020-2021	100%											