

**Wayne Community College**  
**Program Review and Outcome Assessments, 2018-19**

**Institutional Goal 2: Ensure Program Excellence**

**Institutional Goal 3: Improve Student Success**

**Department Name:** Automotive Systems Technology

**Mission/Purpose:** The purpose of the Automotive Systems Technology Program is to prepare individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles.

**Foreword**

Technical programs, like the Automotive Programs at Wayne Community College, often use lots of acronyms and terms that may not be familiar. In this brief program description, most of these terms are clarified.

Wayne Community College (WCC) offers automotive programs with multiple tracks to graduation. The Program code is 60160 (A60160 for Associate Degree, C60160 for certificates and D60160 for Diplomas). The name of the programs is Automotive Systems Technology.

The nationally recognized accreditation agency for the automotive programs is The Automotive Service Excellence Education Foundation, known as ASE Educational Foundation (formerly known as NATEF). There are 3 levels of "Certification": Maintenance and Light Repair (MLR), Automotive Service Technician (AST) and Master Automotive Service Technician (MAST). The highest level of program certification is MAST. WCC is MAST certified. More information on NATEF can be found at [www.aseeducation.org](http://www.aseeducation.org). In this Program Review document, the term NATEF is used. Automobile Technicians are encouraged to participate in national certification. The nationally recognized certification agency for automobile repair technicians (mechanics) is the National Institute for Automotive Service Excellence, known as ASE and ASE Certification. The certification exams are broken up into 8 areas of the vehicle. When a technician passes all 8 exams, they are considered ASE "Master Certified". It is a requirement that all automotive teachers at WCC must be ASE Master Certified.

Most automotive programs at the post-secondary level cover the vehicle systems that are some-what standardized from one brand of vehicle to another. No particular vehicle brand is covered in these types of programs and the students are typically prepared to enter the repair industry upon graduation. WCC has one such program called the Multiple Manufacturer Automotive Technician Educational Program, known as MM-ATEP or "ATEP".

Automobile manufacturers require that their dealership technicians (mechanics) constantly train on their specific product. As systems change on the vehicle and as technology grows, it is imperative that the dealership technicians (mechanics) stay up-to-date. This training for the dealership technician is done online within the dealership or at the manufacturer's training center through the manufacturer's training network.

Practically all automobile manufacturers support or sponsor an automotive training curriculum at the post-secondary level that closely aligns with their "in-house" training mentioned above. Due to the differences found in the different brands of automobiles and use of technology, specific training paths for college automotive students dedicated to a single manufacturer are available at select colleges. Wayne Community College is one of 56 colleges in the US to offer the General Motors Automotive Service Educational Program, better known as GM ASEP. GM ASEP is an associate degree only program. General Motors (GM) supplies the college with training, curriculum and donated vehicles and components to train with. It is a requirement that students maintain employment during the duration of the GM ASEP program. General Motors provides a strict

list of program standards and requirements in order for the program to stay open at the college. GM monitors the program closely. More info on GM ASEP can be found at [www.gmasep.org](http://www.gmasep.org)

WCC's automotive programs are also supported by other manufacturers and 3rd parties. The National Coalition of Certification Centers, known as NC3, Snap-On Tool Company, known as Snap-On, Chrysler's Career Automotive Program, known as CAP Local, AC- Delco, and Toyota all have ties to WCC either through training, certifications or training support. All of these support mechanisms are closely monitored by the companies and organizations that have involvement. In most cases, the support from these companies or organizations are funneled to the Multiple Manufacturer Automotive Technician Educational Program, or MM-ATEP.

In summary, students have 2 primary automotive program tracks to choose from at WCC; the ATEP program and the GM ASEP program. Each program has standards and certifications required, not only of the students, but of the college as well as the teachers.

**Degrees, Diplomas, and Certificates Offered:** Automotive Systems Technology Degree- GM ASEP & MM-ATEP (A60160G and A60160M respectively), Automotive Systems Technology Diploma (D60160), Automotive Maintenance and Light Repair Certificate (C60160)

**Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals.**

The Automotive Technology Programs prepare individuals for employment in the college's/ program's service area through educational, training, and cultural coursework as required by the various accreditation entities and through the guidance of the advisory committee.

**Activities to ensure curriculum currency (2015-16; 2016-17; 2017-18)**

List program curriculum changes, revisions, deletions in table.

Course Title	Date – Updated / Revised / Deleted
AUT 113	2016-17 Revised to TRN 111
AUT 213	2016-17 Revised to TRN 112
MAT 115	2015-16 deleted, MAT 110 added
GM ASEP LDD 112	2016-17 deleted, WBL 131 added
GM ASEP ATT 125	2016-17 deleted, WBL 131 added

**Provide an overview of the significance of the program changes and improvements that occurred over the past three years**

In 2015, the college notified the automotive program that MAT 115 requirements in programs should transition to MAT 110. Based on this, MAT 110 replaced MAT 115 effective 2015 in the Automotive Programs at WCC.

In 2016, a Curriculum Improvement Project (known as CIP) concluded with changes to Automotive Program courses for the State of NC Community Colleges. In order to align with new NATEF guidelines, 2 new Maintenance and Light Repair (MLR) courses were required; TRN 111 and TRN 112. Effective for 2016, TRN 111 and TRN 112 replaced AUT 113 and AUT 213.

As General Motors added additional "manufacturer training" courses (primarily online and Hands-on style classes) and as they continued to push the GM ASEP schools to require 3 cooperative education work experiences, the GM ASEP program needed to add one co-op and transition away from following the same course outline as the MM ATEP program. In 2016, the program outline for GM ASEP was re-written to include

3 WBL's (co-ops) (this added additional hours). The LDD and ATT courses were removed from the GM ASEP program since there was no manufacturer support for these classes and the hours were already "heavy".

**Advisory Committee: dates, summary of minutes, activities (2015-16; 2016-17; 2017-18)**

**Summary of Advisory Committee Activities**

Year	Meeting Dates	Recommendations / Activities
2015-16	4-12-16 & 10-6-16	NATEF Self Eval, ASEP Co-Op change to 8 on/ 8 off, High school donations, change from traditional classes to hybrid
2016-17	4-6-17 & 9-5-17	Automotive storage building and awning addition approved, uniforms vs. tee shirts/ tee shirts approved
2017-18	4-17-18 & 11-6-18	CAP testing on-site, MLR course evolution, CAP Dealer Day, Apprentice program, new automotive facility

**Describe program's participation with Advisory Committee or external organizations that contribute to maintaining program relevance.** *(See Advisory Committee Meeting Minutes for past three years in Program Review Attachment folder.)*

The Automotive Programs (GM ASEP and ATEP) both have advisory committees that meet twice per year. The NATEF requires advisory committee input to the program in an effort to maintain consistency with industry trends and student placement.

GM ASEP program staff attend the Fixed Operations Club meeting that meets roughly every other month. This club is made up of service managers/ Fixed Ops managers and parts managers as well as General Motors field personnel. GM ASEP program staff also spend large amounts of time visiting General Motors dealerships in the service area. The GM ASEP Program has an association of instructors covering all GM ASEP colleges in North America and China. David Byrd is the Southeast Region Vice President for this organization.

**Analysis of trends in the field or industry**

**Provide narrative for analysis of trends in the field.** *(Are there jobs available for your students? Is there new technology/equipment that needs to be added to your program?)*

Over the last several years it has become increasingly difficult for employers to find individuals willing to make Automotive Repair their career. That same challenge is in place in our recruiting efforts. While the data indicates higher student count, we find that many of the students are not: 1) employable, 2) willing to find a job, 3) mechanically gifted. We also see that (a trend seen over a longer period of time than this data backs-up) students entering the Automotive Program generally lack the skills necessary to start Automotive training that our curriculum supports.

On a more positive note, due to many factors, the Automotive Service field is seeing an increase in the need of service technicians, including entry-level techs. According to General Motors, 10% of the technicians leave the business annually. This gap opens the door for new technicians as we are training. The Emsi report indicates a 3% increase in job openings 2018-2021 using an estimated number of 393 job openings.

## Faculty Profile

### List of Faculty and Status (2015-16; 2016-17; 2017-18)

Faculty / Name	Full-Time / Part-Time
Joseph Braswell (started 2017)	Full-Time
David Byrd (2015-16; 2016-17; 2017-18)	Full-Time
Kevin Jordan (2015-16; 2016-17; 2017-18)	Full-Time
James (Bryant) Keel (2015-16; 2016-17; 2017-18)	Full-Time

**Have all the faculty credentials been verified?** (*Verified that required documents are in personnel files.*)  
All instructors meet the degree requirements as well as the NATEF/ ASE certification requirements.

### Faculty Contact and Credit Hours

Faculty / Name	Full-Time Part-Time	Summer 2015		Fall 2015		Spring 2016	
		Contact	Credit	Contact	Credit	Contact	Credit
Kevin Jordan	Full-Time	15	9	20	13	34	22
David Byrd	Full-Time	10	8	20	14	16	20
James Bryant Keel	Full-Time	9	6	20	11	20	11

Faculty / Name	Full-Time Part-Time	Summer 2016		Fall 2016		Spring 2017	
		Contact	Credit	Contact	Credit	Contact	Credit
Kevin Jordan	Full-Time	14.02	10	34	22	15	12
David Byrd	Full-Time	10	6	25	18	16	16
James Bryant Keel	Full-Time	11.98	10	30	16	22	14

Faculty / Name	Full-Time Part-Time	Summer 2017		Fall 2017		Spring 2018	
		Contact	Credit	Contact	Credit	Contact	Credit
Kevin Jordan	Full-Time	16	10	25	15	15	12
David Byrd	Full-Time	11	7	19	14	15.50	11
James Bryant Keel	Full-Time	6	4	25	14	22	14
Joseph Braswell	Full-Time			12	8	18.50	15

### Faculty Demographics (2015-16; 2016-17; 2017-18)

	# Employees	Avg. Years of Service	% of Automotive Classes Taught By
Full-Time	4	9.25	100
Part-Time	0	0	0

**Provide narrative for adequacy of faculty numbers.** (*Do you have enough faculty to support your program?*)

With the addition of Joseph Braswell to support the GM ASEP Program and first semester MLR courses, current loads are balanced. If any additional "stand-alone" programs are added, additional faculty will be needed.

### Professional development activities of faculty (2015-16; 2016-17; 2017-18)

Please see the departmental professional development (PD) tracking logs that are completed and filed in Program Review Professional Development folder.

## Student Demographics

<b>Gender (A60160) Unduplicated</b>			
<b>Academic Year</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
2015-2016	2	83	85
2016-2017	3	86	89
2017-2018	1	66	67

<b>Gender (D60160) Unduplicated</b>			
<b>Academic Year</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
2015-2016	0	2	2
2016-2017	0	0	0
2017-2018	0	0	0

<b>Gender (C60160) Unduplicated</b>			
<b>Academic Year</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
2015-2016	1	14	15
2016-2017	0	11	11
2017-2018	0	4	4

<b>Ethnicity (A60160) Unduplicated</b>							
<b>Academic Year</b>	<b>American Indian</b>	<b>African American</b>	<b>Asian or Pacific Islander</b>	<b>Hispanic</b>	<b>Caucasian</b>	<b>Other / Unknown / Multiple</b>	<b>Total</b>
2015-2016	2	12 (14%)	1	31 (36%)	38 (45%)	1	85
2016-2017	1	16 (18%)	1	29 (33%)	40 (45%)	2	89
2017-2018	0	14 (21%)	1	21 (31%)	27 (40%)	4	67

<b>Ethnicity (D60160) Unduplicated</b>							
<b>Academic Year</b>	<b>American Indian</b>	<b>African American</b>	<b>Asian or Pacific Islander</b>	<b>Hispanic</b>	<b>Caucasian</b>	<b>Other / Unknown / Multiple</b>	<b>Total</b>
2015-2016	0	1	0	0	0	1	2
2016-2017	0	0	0	0	0	0	0
2017-2018	0	0	0	0	0	0	0

<b>Ethnicity (C60160) Unduplicated</b>							
<b>Academic Year</b>	<b>American Indian</b>	<b>African American</b>	<b>Asian or Pacific Islander</b>	<b>Hispanic</b>	<b>Caucasian</b>	<b>Other / Unknown / Multiple</b>	<b>Total</b>
2015-2016	0	4	0	3	7	1	15
2016-2017	0	2	0	4	5	0	11
2017-2018	0	1	0	1	2	0	4

<b>Age Groups (A60160) Unduplicated</b>						
<b>Academic Year</b>	<b>Under 18</b>	<b>18-24 years</b>	<b>25-34 years</b>	<b>35-44 years</b>	<b>45 and older</b>	<b>Total</b>
2015-2016	0	68	11	3	3	85
2016-2017	0	71	12	4	2	89
2017-2018	0	55	4	4	4	67

<b>Age Groups (D60160) Unduplicated</b>						
<b>Academic Year</b>	<b>Under 18</b>	<b>18-24 years</b>	<b>25-34 years</b>	<b>35-44 years</b>	<b>45 and older</b>	<b>Total</b>
2015-2016	0	1	1	0	0	2
2016-2017	0	0	0	0	0	0
2017-2018	0	0	0	0	0	0

<b>Age Groups (C60160) Unduplicated</b>						
<b>Academic Year</b>	<b>Under 18</b>	<b>18-24 years</b>	<b>25-34 years</b>	<b>35-44 years</b>	<b>45 and older</b>	<b>Total</b>
2015-2016	1	12	1	1	0	15
2016-2017	2	9	0	0	0	11
2017-2018	1	3	0	0	0	4

**Provide narrative for analysis of student demographics.** *(Are you satisfied with your program demographics? Do you have a diverse population of students?)*

Based on the data, the average student is 18-24 years old, white male. Data suggests that, although it is a small number, the percentage of 25-34 year olds has significantly decreased. Trends in demographics show a decline in the percentage of female students, slight decrease in the percentage of Hispanic, steady decrease in the percentage of Caucasian, slight increase in the percentage of African American students. Generally, female students tend to be more customer oriented and have a great attention to repair procedures that yield to details.

**Program Enrollment (Fall, Spring, Summer)**

<b>Program Enrollment (A60160) Unduplicated</b>		
<b>Year</b>	<b>Enrollment</b>	<b>3-Year Average</b>
2015-16	85	90
2016-17	89	85
2017-18	67	80

<b>Program Enrollment (D60160) Unduplicated</b>		
<b>Year</b>	<b>Enrollment</b>	<b>3-Year Average</b>
2015-16	2	1
2016-17	0	1
2017-18	0	1

<b>Program Enrollment (C60160) Unduplicated</b>		
<b>Year</b>	<b>Enrollment</b>	<b>3-Year Average</b>
2015-16	15	9
2016-17	11	12
2017-18	4	10

**Provide narrative for analysis of program enrollment.** (Is enrollment increasing or decreasing? What possible reasons for increase/decrease? Describe how you plan to address program enrollment.)

Based on the data, enrollment declined in the Associate degree program by 10 students. Enrollment was generally flat in the Certificate program and diploma program.

While enrollment numbers and FTE remain the primary gauge for program growth or decline, there is no clear relationship between students that are career oriented versus students that are not. We find that the path to employment is very fast in our 5 semester degree program and that some students often drop out when we stress the importance of gainful employment. We feel that the students that do stay the course are quality students and uphold the standards and ethics we instill. This, in turn, attracts employers and students alike.

**Program Outcomes**

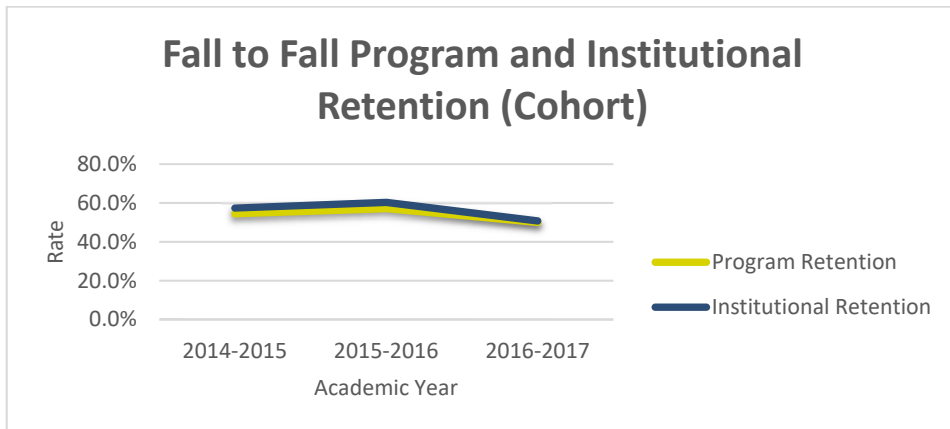
**Retention**

**Baseline:** 53% (Average of last three years – 2014-15; 2015-16; 2016-17, fall-to-fall program retention)  
**Standard:** 56%  
**Target:** 60%

**Data/Results:**

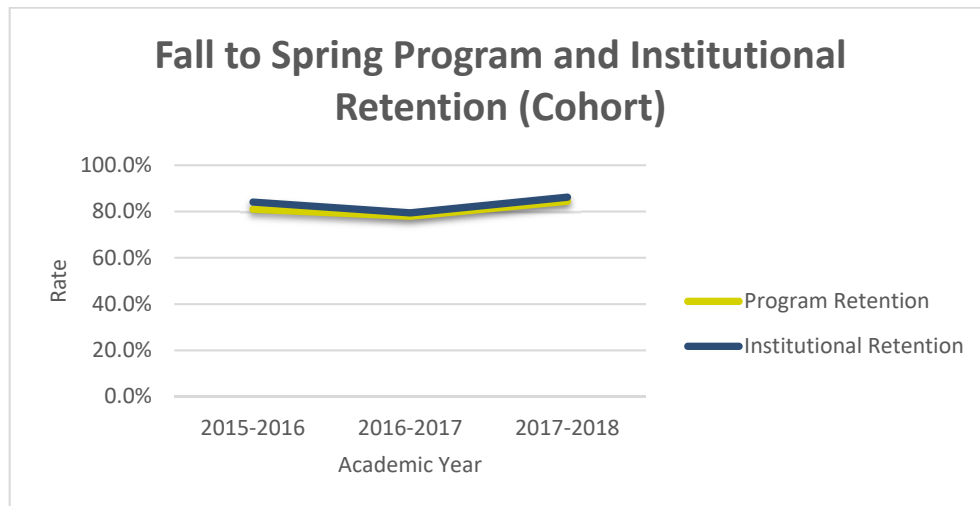
**Fall-to-Fall**

<b>Year</b>	<b>Fall Enrollment</b>	<b>Grads</b>	<b>Return</b>	<b>Non-Completers</b>	<b>Program Retention</b>	<b>New Program</b>	<b>Institutional Retention</b>
2014-2015	68	9	28	29	54.4%	2	57.4%
2015-2016	63	11	25	25	57.1%	2	60.3%
2016-2017	68	9	25	33	50.0%	1	50.7%



## Fall-to-Spring

Year	Fall Enrollment	Grads	Return	Non-Completers	Program Retention	New Program	Institutional Retention
2015-2016	63	1	50	10	81.0%	2	84.1%
2016-2017	68	0	53	14	77.9%	1	79.4%
2017-2018	58	1	48	8	84.5%	1	86.2%



**Provide narrative for analysis of program retention.** *(Based on the data, provide a narrative of your analysis of fall to fall retention. Indicate factors that may have affected your retention. State any changes you plan to address for next year that may affect / increase your retention.)*

Fall to Fall retention data shows an average of 53% program retention based on the number of enrolled students in the Fall compared to returning students the following Fall. We understand based on our current data collection methods and unique program structure, Fall to Fall retention numbers will be low. The use of achievement coaches may be needed during the first Fall semester to help determine why students are not returning and offer assistance in helping them complete the program.

**Provide narrative for analysis of standard/target.** *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

Based on the data collected, neither the standard nor the target were met. For the next Fall semester, it will be advised to bring in achievement coaches to help determine if students are facing unknown circumstances that are preventing them from returning the following semesters.

New program retention standard and target was set based on the three-year baseline data from 2014-15, 2015-16, and 2016-17 fall to fall retention.



## Completions

**Baseline:** 25 (Average of last three years – 2015-16; 2016-17; 2017-18)

**Standard:** 30

**Target:** 35

### Data/Results:

Number of Graduates (Completions) <i>Unduplicated</i>				
	Degree	Diploma	Certificate	Total
2015-16	13	1	1	15
2016-17	14	1	16	31
2017-18	13	1	15	29

**Provide narrative for analysis of completions.** (Are you satisfied with your completion rates? How might you increase your completion rates?)

We are somewhat satisfied with the current completion rates as reflected by the current data collection method. The automotive department is always improving recruitment, advising and retention methods so an increase in completion is always expected.

**Provide narrative for analysis of standard/target.** (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

New completion standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

## Job Placement / Employment (to be provided by program)

**Baseline:** 37% (Average number employed for the last three years – 2015-16; 2016-17; 2017-18)

**Standard:** 40%

**Target:** 45%

### Data/Results:

Employment Demand						
Year	Graduates	# Employed (within 1 Yr)	# Seeking More Education (within 1 Yr)	% Employed & Seeking More Education	Unknown	Other/Comments
2015-16	15	No info avail	3	20%		
2016-17	31	No info avail	13	42%		
2017-18	29	No info avail	14	48%		

**Provide narrative for analysis of job placement rates.** *(Are students finding jobs within the program of study?) (How can your program promote higher employment of students in the field?)*

Based on current observations of students in the automotive program, most are employed in positions related to their program of study. GM ASEP students, due to work based learning and program requirements, must be employed and maintain employment throughout the two year degree. MM ATEP students are currently not required to obtain employment but it is strongly suggested. Recent additions of manufacture partnerships in the MM ATEP program have brought up the discussion for requiring employment and requiring completion of work based learning for those students as well. By requiring ATEP students to complete work based learning and maintain employment, higher job placement percentages would be expected. Faculty will attempt to track students' job placement in the future.

**Provide narrative for analysis of standard/target.** *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

New employment demand standard and target was set based on the three-year baseline data from 2015-16, 2016-17, and 2017-18.

**Provide narrative for analysis of Labor Market Data.** *(Review Labor Market Data provided and provide an assessment of the data.)*

According to the Target Occupation data supplied, there are approximately 1325 annual openings in 3 occupation clusters. Growth expected through 2021 is a positive 3.22%. For 2017 (the only year that the data is available for) WCC Automotive is third in the State of North Carolina (behind FTCC and PittCC) in total program completions. With our service area expanding (due to manufacturer-based program offerings) we anticipate further growth in the number of students and employment opportunities.

#### **Licensure and Certification Passing Rates (if applicable)**

**Baseline:** XX% *(Average of last three years; identify last three licensure years)*

**Standard:** XX%

**Target:** XX%

**Data/Results:** *Not applicable to the Automotive Systems Technology program.*

**Provide narrative for analysis of licensure / certification passing rates.** *(Are you satisfied with your program licensure rates?)*

Not applicable.

**Provide narrative for analysis of standard/target.** *(As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)*

Not applicable.

### Third-Party Credentials (if applicable)

**Baseline:** 100% (Average number of completers for the last three years – 2015-16; 2016-17; 2017-18)  
**Standard:** 100%  
**Target:** 100%

#### Data/Results:

#### Third-Party Credentials

Year	Credentials for Program of Study	# Tested	# Completers
2015-16	There are multiple certifications embedded within the automotive courses. Students cannot proceed until prerequisites and core competencies are met.		
2016-17			
2017-18			

**Provide narrative for analysis of third-party credentials.** (Are there other industry-recognized credentials that needs to be addressed for the program of study?) (What are other means to promote program third-party credentials?)

With relationships with multiple entities, we offer too many 3<sup>rd</sup> party credentials to list here. A detailed chart has been placed in the appendix section that breaks down all of the credentials and when they are administered.

**Provide narrative for analysis of standard/target.** (As a result of the data analysis, indicate changes to the standard or target. Did you meet your standard/target? If you met your standard/target, what percentage would you like to increase your standard/target? Please provide an overall analysis of the results of your standard/target. Provide percentage of increase/decrease.)

We are satisfied with the number of 3<sup>rd</sup> party credentials we offer/ require. With updates in the industry occurring every year, these credentials will help steer our curriculum.

#### Course Success

#### Analysis of student success in courses (2015-16; 2016-17; 2017-18)

**Provide narrative for analysis of student success in courses.** (Ex – Are more students successful in online courses versus traditional? Are students more successful in certain courses?)

By nature of the curriculum and course content, some courses are more difficult than others. Students seem to obtain the poorest grades in the most difficult courses and better grades in the easier courses. Success percentages show that the poorest grade averages are in TRN 110 and TRN 112. Both of these classes are ran back-to-back in the students first semester. We attribute the poor success rates in these classes to the fact that many students drop out in the first semester. We believe this is because the students determine that they have enrolled in a program, by perception, that will be “easier” than it is or is similar to a hobby shop. Once the small number of students realize this, they often quit the program and wind up with a “WF” which hurts these data figures.

### Analysis of student success in distance learning courses (2015-16; 2016-17; 2017-18)

Course Success Rates by Method of Instruction				
Semester	Department	Course Number	% Success	Method of Instruction
Unknown	Automotive	AUT-116	78%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-141	73%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-151	75%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-163	75%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-181	94%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-183	94%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-231	89%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-281	72%	Web supplemented/ Hybrid
Unknown	Automotive	LDD-112	70%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-110	67%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-111	70%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-112	67%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-120	83%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-140	86%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-140A	83%	Web supplemented/ Hybrid
Unknown	Automotive	TRN-170	100%	Web supplemented/ Hybrid
Unknown	Automotive	AUT-116	78%	Web supplemented/ Hybrid

**Provide narrative for analysis of student success in distance learning courses.** (Are distance education course success rates equivalent to the success rates for other methods of instruction?)

All Automotive Courses are Hybrid or web-based. Students do not have an option in taking non-hybrid courses.

### Analysis of Program Learning Outcomes (PLO) (2015-16; 2016-17; 2017-18)

- Document PLO cycle for the next four years (2018-19, 2019-20, 2020-21, and 2021-22) in the table below.
- File program learning outcome reports for the past three years (2015-16, 2016-17, and 2017-18) in the Program Review Attachment folder.
- Document changes to the program learning outcomes and/or assessment cycle.

Assessment Cycle	Program Learning Outcomes
2018-19	PLO 1: Diagnose and Repair concerns related to ASE Areas A1-A8
2019-20	PLO 1: Diagnose and Repair concerns related to ASE Areas A1-A8
2020-21	PLO 1: Diagnose and Repair concerns related to ASE Areas A1-A8
2021-22	PLO 1: Diagnose and Repair concerns related to ASE Areas A1-A8

## Other Assessments

### **Analysis of graduate survey data (2015-16; 2016-17; 2017-18)**

**Provide narrative for analysis of program-specific graduate survey data.** *(What did you learn from the results? What did your graduates indicate needed to be revised within your program?)*

We continue to believe that the graduate survey needs to be revised and become specific for our graduates in order to capture the data that would be most useful to us due to the uniqueness of our programs. Based on the data, students appear to be generally satisfied with the program and their progress through it. Additionally, the services offered at WCC appear to be sufficient for the graduates.

### **Analysis of employer survey data (2015-16; 2016-17; 2017-18)**

**Provide narrative for analysis of program-specific employer survey data.** *(What did employers indicate needs improvement within your program (equipment, facilities, program offerings/certificates?)*

No program-specific data was provided, however, we believe that the employers are generally satisfied with our program and graduates.

## External Reviews

**In addition to SACSCOC, is there an accrediting body specifically related to the program? If so, please name the professional organization, describe the program's current status, and most recent date of accreditation.**

Both automotive programs are certified through the ASE Educational Foundation. This is a 5 year certification and expires on 1-1-2022

## Resources

### **Program facilities - location and adequacy**

**Provide narrative for program facilities adequacy and/or needs.**

While classroom space is sufficient for the program at this time, shop space (Lab area) is very restrictive. By nature of the automotive business, equipment and vehicles naturally consume a lot of floor space. This has caused issues with growing enrollment. Limited storage space, limited lab space creates difficult learning environments.

### **Library resources**

**Provide narrative for program library resources.** *(Are library resources adequate for your program?)*

The library provides monthly publications as well as linked electronic materials students can use to stay informed on industry trends and updates on new product. Additionally, the Library has books that are automotive related.

### Planning Objectives (2015-16; 2016-17; 2017-18)

- Verify previous year's prioritized planning objectives end-of-year status reports are filed in Program Review Planning Objective EOY (End of Year) Status Reports folder.
- Provide a summary of planning objectives submitted for the last three years, including the use of results, of the planning objectives in the table provided.

### Summary of Planning Objectives

Planning Year	Objective(s) Submitted	Use of Results
2015-16 #1	Diagnostic Scantool Upgrades 5 General Motors Multiple Diagnostics Interfaces 1 PicoScope Vibration Diagnostic Tools 2 PicoScope Lead Kits	Approximately 16 curriculum students and 15 GM Dealer technicians have been trained on and have actively used the Pico Scopes and MDI tools we have through this planning objective purchase. It is estimated that full classes (12- 15) of GM ASEP Students will use the MDI tools on a regular basis throughout each Automotive class in each semester in which they are enrolled. During at least 2 curriculum courses, students will use the PICO Scope for vibration analysis and oscilloscope functions.
2015-16 #2	Hunter Wheel Alignment System	Outcome met, 100% of the automotive students passed the Steering and Suspension ASE Student Exam for Steering and Suspension.
2016-17 #1	5 Verus Edge Scantools	These Scan Tools have provided the benefit of providing 3rd party certification through NC# and have allowed students to be familiar with an array of different scan tools found in industry. Automotive students will continue to use these tools each semester. 3rd party certification will continue to be awarded.
2016-17 #2	1 ATech GM OBD2 Trainer 1 ATech GM Electronic Ignition System Trainer	These Scan Tools and trainers have provided the benefit of providing 3rd party certification through NC3 and have allowed students to be familiar with an array of different scan tools found in industry. In addition, the trainers, which are an integral part of the tool certification and training have proven to be a unique recruiting tool. We have used it as "show and tell" for our recruitment events. Automotive students will continue to use these tools and trainers each semester. 3rd party certification will continue to be awarded.
2017-18	None Approved	N/A

### **Overall analysis of the strengths of the program**

#### **Provide narrative for analysis of the strengths of the program.**

The Automotive Systems Technology Programs benefit from strong industry partnerships, an active recruitment process, relationships with employers, State-of-the-art equipment, regional coverage (specific to GM ASEP, FCA and Nissan), and instructors that are passionate about their programs. Additionally, a strong economy coupled with increased need for qualified technicians means demand is very high for the students we train.

### **Overall analysis of the weaknesses of the program**

#### **Provide narrative for analysis of the weaknesses of the program.**

Over the last several years, we have seen a decrease in the number of career-oriented/ interested traditional students. There is a larger number of students that have a limited background in the automotive industry; many not coming from a high school automotive program. Additional notes from instructors:

- Class and lab space force students to team up on projects and assignments when a solo attempt on assignment would better measure student's individual ability to perform the task.
- Hours of classes offered sometimes doesn't work with all students schedule.
- The amount of time that instructors have available for dealer visits and other business relations activities is sometimes limited.
- The location of space that is available for tool and supply storage is not convenient to the main lab and classroom area, due to lack of space in that area.

### **Recommendations**

- Complete 2018-2019 Program/Service Review/Outcome Assessment Recommendation Worksheet to address action items from program review and outcome analysis with target date; and methods to assess action items.
- File Review/Outcome and Assessment Recommendation Worksheet in Recommendation and Follow-Up folder.
- Recommendation follow-up reports to be addressed spring semester following review year (2019-20 and 2020-21).

**Recommendations from Program Review and Outcome Assessments**  
**Name of Program: Automotive Systems Technology**  
**2018-2019 Program Review and Outcome Assessments Recommendations**

***(Address program outcome assessments that fall below the established standard and/or target and additional recommendations resulting from the review.)***

<b>Outcome</b> <i>(Identify projected outcomes as a result of your program/service review.)</i>	<b>Target Date</b> <i>(Identify your projected target date for completion of action items.)</i>	<b>Actions/strategies to achieve outcomes and how you will assess the action/strategy</b>
Retention – Fall to Fall  Baseline – 53% Standard – 56% Target – 60%	Fall 2021	Achievement coaches will be called in to assess any circumstances student may be facing that prevents them from returning each semester. These coaches can help identify issues and offer suggestion to the student as well as the instructor/advisor to help the student be successful.
Completions –  Baseline – 25# Standard – 30# Target – 35#	Fall 2021	With this addition of other manufacturer partners and through improvements in recruiting and advising methods we expect to see an increase in the next reporting cycle. This will be assessed by comparing past completion numbers to current completion numbers.
Job Placement –  Baseline – 37% Standard – 40% Target – 45%	Fall 2021	With the GM-ASEP currently requiring job placement as part of the program and perhaps having MM-ATEP require students to complete work based learning and maintain employment, higher job placement percentages would be expected. This would be assessed by looking for an increase in automotive students placed in careers related to their field of study.
Licensure/Certification Passing Rates (if applicable) - Not applicable.	N/A	N/A
Third-Party Credentials -  Baseline – 100% Standard – 100% Target – 100%	By semester and annually	Track number of third-party credentials acquired within each of the courses.
Additional Recommendation - Not applicable.	N/A	N/A



**VP / AVP Approval**

- Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to review and approve the Program Review and Outcome Assessment and Recommendations as submitted.

**Date of Review / Approval:** DocuSigned by: Dorothy Moore 5/7/2020  
C63FA9C7DD30473...

**Signature (electronic signature):** DocuSigned by: Patty Pfeiffer 5/7/2020  
6FEB32F14792429...