Helena College Academic Program Review

Year:	2023-24	Review:	Automotive Technology 2023 -24	Author:	Jones, Dave	Status:	Published

Section 1: Program Review

Credentials:

C.A.S. Auto, A.A.S. Auto, C.T.S. Hybrid Vehicle

Description:

The Automotive Technology curriculum consists of eight areas of study as defined by the National Institute for Automotive Service
Excellence (ASE). ASE is a non-profit corporation dedicated to improving the quality of automotive service and repair as well as assisting in training and program development throughout the nation. The eight ASE content areas of study, along with the College's
general education requirements, are structured into four groups with all eight areas of study being offered during a two-year period.
Each student will be given the opportunity to become certified by ASE in each of the eight content areas. Successful completion of
this program will enable students to enter the automotive job market.

Misson Statement:

The mission of the Automotive Technology program at Helena College is to provide entry-level technicians training in the fundamentals of automotive repair and maintenance with respect to the general automotive industry.

Mission Alignment:

Alignment is demonstrated through quality instruction and a connection to industry that benefits students wishing to gain employment as automotive technicians.

Additional Comments:

During the timeframe of the 2023-2024 Program Review, the HC Automotive Program was substantially impacted by the failure to register new students in the fall of 2018 and again in the fall of 2023. Both of these events were the direct result of the inability to hire a qualified second instructor for the program.

Section 2: 5-Year Summary

Previous Recommendations:

Recommendations from 2019-2020 Self Study:
1. Remove the Automotive Program from moratorium and restore new student registration to every year.
2. Return the program to two full-time instructors.

In the fall of 2019 the Automotive Program was removed from moratorium and registered 14 new students. Jerry Stewart was hired as the first-year Automotive instructor for AY 2020-2021. The program operated with two full-time instructors until the fall of 2023. The number of new fall entry students averaged 13.75 for the four years from the fall 0f 2019 to the fall of 2022.

Annual Work Plans:

AY 2018-2019
Due to the inability to hire a qualified Automotive Instructor, the HC Automotive Program was put in moratorium and did not allow the registration of new students for the fall of 2018 semester.

AY 2019-2020
In the fall of 2019 the Automotive Program was removed from moratorium and registered the first cohort of 14 new students that would be attending under the new curriculum that included a new work-based learning component.
The Automotive faculty, the Trades Division Chair, the Dean/CEO, the Associate Dean of Academic and Student Affairs, the President of the Montana Auto Dealers Association, local automotive dealerships, and independent repair shops met and constructed a Partnership Agreement that provides Helena College students an opportunity to engage in a work-based learning experience during their two years at Helena College.
It was decided not to recertify the Automotive Program with ASE Education (National Institute for Automotive Service Excellence ASE), however, published ASE guidelines would still be used in curriculum development for the HC Automotive Program.
ASE Education certifies automotive training programs. Students benefit by exposure to a curriculum that prepares them to take written tests offered by ASE. In order to be an ASE certified technician, the student must pass the ASE written examination/s and have at least two years verifiable professional work experience. Graduation from an ASE certified program will allow one of the two-year work experience requirements to be waived. Anyone can attempt the written examinations and any program can access the ASE Program Standards. It was determined that if the HC Automotive Program followed the ASE Standards, that graduates would be prepared to attempt the written examination. The main benefit of having an ASE certified program for HC students would then only be the waiver of one year of the employment requirement. Because HC has implemented a work-based component, graduates would already have at least one year of work experience. Therefore, the added expense of certification was determined to not be worth the value to HC graduates.

2020-2021
In anticipation of delivery of an upcoming Hybrid Electric Vehicle Summit and a new Introduction to Hybrid Electric Vehicle Technology Course, lecture lessons, lab exercises, and assessment tools were developed; hybrid and electric vehicles, components, and test equipment was purchased. In the spring of 2021 AST 272 Introduction to HEV Technology was delivered to the first cohort who had entered under the new curriculum.

2021-2022
The new CAS cohort began with the fall registration. In the spring semester 2022 seven CAS degrees were awarded to Automotive students. In January 2022 the HC Automotive Program delivered the first week-long Hybrid/Electric Vehicle Summit.

2022-2023
Based on feedback from the Automotive Advisory Committee, the first Automotive Inspection Days were on October 19th and 20th. Approximately 20 cars from the community were inspected by first-semester Automotive students. This event was designed to give new students more experience on basic vehicle maintenance before starting their work-based learning in local businesses.
Second-year students used Electude and Ford ACE for online web-based training in second-year Auto courses. This allowed for a four-day class schedule and gave students a little more flexibility in managing their time with their work and school schedule. This did not appear to have any appreciable effect on grades.

Successes/Strengths:

1. Community Enrichment: The HC Automotive Program has continued to foster an environment of learning through partnerships with business, industry, and community. Some of the highlights of the last 5 years include:
•In June of 2019 the HC Automotive program delivered two weeks of automotive electronics training to Montana Department of Transportation employees. In June of 2023 another two-week workshop on (?) was given to DOT employees.
•The HC Automotive Program has hosted the annual Skills USA State Finals for High School Automotive students beginning in the Spring 2020.
•In January of 2022, and again in January of 2023 the HC Automotive Program delivered a week-long Hybrid/Electric Vehicle Summit to automotive technicians, educators, and students across the country.
•Starting in AY 2022-2023 HC partnered with the Montana Department of Corrections to deliver remote classroom training to qualifying inmates in the Montana State Prison. Inmates can earn a Certificate of Applied Science while still incarcerated and after release go on to earn an AAS at Helena College in Automotive Technology Program by completing the second year on campus. The hands-on portion of the CAS is delivered by the Department of Corrections at the Montana State Prison.
•Helena college partners with NAPA Autotech to host 6 training seminars annually. These night classes are offered to HC Automotive students and community businesses.
2. Provide Access:
•All Automotive courses were delivered online in the spring 2022 during the COVID lockdown.
•Remotely delivered CAS in Automotive Technology delivered in partnership with the Montana Department of Corrections.
•A four-day-a-week hybrid delivery was also adopted in several courses post-COVID. One day a week delivered using web-based training tools allows students and employers more flexibility in their work-based training schedules.

3. Using funding sources to acquire and update equipment:
•Hybrid Electric Vehicle grant (name and $$?) HV Battery Tester, Prius, 2021 Honda Insight, Nissan Leaf, Automotive Lifts,
•COVID Funds - Zeus Scan Tools
• Perkins - brake lathe, Road Force Wheel Balancer, Cooling system Flush Machines.

Challenges:

1. Hiring and retaining qualified faculty has been an on-going problem in the Automotive Technology program. In the Fall AY 2018-2019, and again AY 2023-2024, the HC Automotive Program did not allow registration of any new fall-entry students due to the inability to hire qualified faculty.
2. Recruitment of new students that possess the aptitude and basic skill set required of modern automotive technicians is an on-going challenge in the field. The complexity and rate of technological change in the modern automobile requires a higher level of reading comprehension and abstract reasoning than was previously necessary. This is a nationwide problem not unique to Helena College.
3. Student retention is another ongoing challenge for the HC Automotive program. With the rapid advances in automobile complexity, the required academic performance of students has also increased.

Section 3: Student Learning

Credential Learning Outcomes:

AUTO AAS
1Demonstrate safe shop practices and hazardous material handling.
2Diagnose and repair automotive electrical systems to NATEF Standard.
3Diagnose and repair automotive engine performance, fuel, and emission control systems to NATEF Standard.
4Diagnose and repair automotive brakes suspension, and steering systems to NATEF Standard.
5Diagnose and repair automotive internal combustion engine systems to NATEF Standard.
6Diagnose and repair automotive powertrain systems (manual and automatic transmission/transaxles and drive axles) to NATEF Standard.
7Diagnose and repair automotive heating and air conditioning systems as to NATEF Standard.

AUTO CAS
1Demonstrate safe shop practices and hazardous material handling.
2Demonstrate proficiency in all basic automotive maintenance repairs including oil changes, tire changes and rotations, fluid inspection and changes/flushes, and vehicle inspections.
3Diagnose and repair basic automotive electrical issues.
4Diagnose and repair automotive brakes systems to ASE standards.
5Diagnose suspension and steering systems to ASE standards.
6Diagnose and repair manual powertrain systems to ASE standards.
7Diagnose and repair basic engine mechanical systems to ASE standards.

AUTO Hybrid CTS
1Demonstrate safe shop practices and hazardous material handling.
2Demonstrate proficiency in all basic automotive maintenance repairs including oil changes, tire changes and rotations, fluid inspection and changes/flushes, and vehicle inspections.
3Diagnose and repair basic automotive electrical issues.
4Diagnose and repair basic engine mechanical systems to ASE standards.
5Diagnose and repair automotive engine performance, fuel, and emission control systems to ASE Education Foundation.
6Demonstrate the proper use of high voltage personal protective safety equipment and procedures when servicing the high voltage systems on hybrid electric vehicles.
7Demonstrate basic knowledge of operation, diagnostic procedures, and service practices related to hybrid automotive and light duty truck high voltage components.

Assessment:

Student learning is assessed using a combination of written examinations and graded hands-on lab activities. Course and credential learning outcomes require demonstration of mastery of a combination of cognitive (theory-based) and performance (task-based) activities. Written examinations assess student's knowledge of terminology, component function, system operation, failure analysis, and symptom-based diagnosis. Lab assignments assess students' ability to follow written procedures, properly use tools and test equipment, analyze test results, and perform repairs. Classroom and lab activities cannot be separated; both are equally necessary and reflect the skill set required of a productive automotive repair technician.
Assessments therefore reflect both understanding and performance. A student's final course grade is calculated on both lab and lecture scores.

Curriculum/Assessment Changes:

1. Given the exponential increase in the knowledge base that a student is required to learn and the restraints in contact hours and credits required to earn an AAS, a higher percentage of a student's time is spent in knowledge-based learning at the expense of skills-based learning. In simpler terms classroom activities requirements leave less time for lab activities. To address this problem, in AY 2018-2019 the Automotive Technology Program curriculum was revised to include a work-based learning component. Helena College now collaborates with independent repair shops and new car dealerships to provide work-based learning opportunities for automotive students. Students attend either morning or afternoon classes at Helena College and work in local business to gain more hands on experience.

2. In the spring of 2022 Helena College submitted an application for Second Chance Pell approval in order to offer our Certificate of Applied Science in Automotive Technology to inmates at the Montana State Prison. Approval was received in May 2022 and the first cohort of students completed their FAFSA applications in May, with their classes beginning August 2022, aligning with Helena College's fall semester.'

Section 4: Alignment with Community Needs

Community Partnerships:

Industry Partnerships:
1. Work- Based Learning Experience Apprenticeship/Internship Partnership Agreement. HC collaborates with local independent repair shops and new car dealerships to provide work-based learning experiences for HC Automotive students.
2. HC sponsors 6 evening classes per year with NAPA Autotech. These classes are taught by Autotech instructors and are offered to local automotive businesses and to HC Automotive students.
3. HC contracts with the Montana Department of Transportation to offer training to DOT employees on a semi-annual basis. These classes are taught by HC Automotive instructors and delivered at HC.
4. The HC Automotive Program collaborates with the Montana Department of Corrections to offer a CAS degree in Automotive Technology remotely to qualifying inmates at the Montana State Prison in Deerlodge Montana.
5. Helena College Automotive Program hosts Montana Skills USA State Finals Contest for high school automotive students. Winning high school students can go on to compete at the Skills USA National Finals Contest. HC Automotive instructors and students design, ,conduct, and judge the contest.

Advisory Board:

Automotive Partners and Board Members
Nick Fox, Point S Tire and Auto
John Johnson, Placer Motors
Kit Johnson, J4 Automotive
Bruce Knudsen, MT Auto Dealers Assoc.
Jillian Nash, MT Auto Dealers Assoc.
Mark Lillrose, MT Dept. of Labor
Scott Lynch, Helena Motors
Nick Hofferber, Hoff's Automotive
Kim Ballard, Meinike Car Care Center

The Automotive Advisory Council meets annually. The meetings are used to discuss changes in program/degree offerings, curriculum changes, events at the college, and automotive student readiness and performance in the field. One example of the Advisory Council's involvement in changes made to the curriculum would be The Automotive Mechanics Core (AST 103) curriculum. The need to change AST 103 course outcomes to better prepare students to meet the employer's needs was first discussed at the October 16, 2019 meeting. It was determined that students needed more drill and practice on basic maintenance procedures. This topic was again discussed in the February 19, 2020 meeting, before changes were made in the fall of 2020. The minutes for November 9, 2022 state that students were held back from applying for jobs the first 5 weeks of semester. This gave them time to work on the basics such as rotating tires, oil changes, torque on bolts, etc.

Section 5: Data Review

Enrollment/Annual Average FTE:

Because new students were not allowed to enter the program in Fall AY 2018-2019, annual enrollment and FTE five-year averages were negatively impacted. It is difficult to say how shutting down new student registration in AY 2018-2019 and AY 2023 -2024 could have also affected program enrollment in other years by decreasing public confidence in the consistency of the program. The COVID lockdown in the spring of 2020 may have also affected the registration of new students in the fall of 2020.

Retention:

Several students were lost in the spring of 2020 due to COVID lockdowns. The Course Completion graph reflects a downturn due to the lockdown affects.

Degree/Certificate Production:

The 150% Graduation graph shows extreme variation ranging from 20% to 100% from the fall of 2016 to the fall of 2020 this underscores the difficulty of deriving very useful data from such small groups. From AY 2018,2019 to AY 2023 the average size of the entering cohort was 11 students.

Market Analysis:

Financial Impact per FTE:

Data regarding program expense per FTE was not provided.

Other Comments:

Section 6: Resources

Faculty & Staff:

Name	Title	FTE	Years	Highest Education
Dave Jones	Automotive Technology Instructor	1.00	29.00	Masters
Stephanie Hunthausen	Executive Director of Career Te	1.00	3.00	Masters

Professional Development:

Budget:

The Automotive Program spending from the program's unrestricted account (H05010) has averaged approximately $15,500 per year. Spending has fluctuated based on student enrollment and major purchases have been made using grant funds (TACT grant, Perkins grant), primarily. The costs associated with the automotive program (equipment, consumables, supplies) have risen due to inflation, but the budget for the program has remained relatively flat. The program is working closely with the Executive Director of CTE to determine the best way to plan for equipment replacement and upcoming needs. Automotive students pay course fees and the program spends approximately $1,000--$2,000 per year from this fee pot (H60260).

Resource Needs:

A second full-time faculty - will allow for entry of new students annually.

Section 7: Recommendations

Rec #	Title	Recommendation
1	Faculty recruitment/retention.	Key Recommendation: Hire full-time faculty member in the fall of 2024. Train and retain the instructor who will teach the first-year automotive classes in the fall of 2025. Rationale: A second full-time faculty member is need in order for the program to accept new students every fall semester. This would make it possible to provide employers with AAS graduates on an annual basis. Success Target: Continuous CAS and AAS graduates annually. Success Strategy: Advertise nationally for a full-time, tenure track, automotive faculty position. Once the instructor is hired, ensure that training and support is provided by automotive faculty and the Executive Director of CTE and Dual Enrollment. Success Resource: A competitive salary and benefit package with opportunities for advancement. Resp. Party: Automotive Technology APRC Response: Cabinet Feedback: We had a good conversation with the faculty and division director regarding the need for two instructors and continuing the program as an AAS, particularly when there is a high attrition rate between first and second year. The faculty shared important industry related information to demonstrate the need for the second year of the program and a second instructor. Helping the new instructor learn the pedagogy of CTE instruction and the processes of HC will help with continued success and quality education.

2	Review Curriculum Delivery	Key Recommendation: Explore other curriculum delivery and class schedule options to provide opportunities for high school students to attend H.C. Automotive courses. Rationale: The U.S. Department of Labor predicts an annual need of 340 automotive technician job openings in the state of Montana. This figure is likely to be adjusted up. As the price of new vehicles continues to increase more rapidly than wages, many wage earners are forced to keep their old vehicles and need the services of trained automotive technicians. Local independent repair shops and new car dealerships involved in the Helena College Automotive Advisory Board all report a shortage in qualified technicians. Success Target: Increase Program Capacity from a 5 year average of 61% to 90%. Success Strategy: More collaboration with the three high schools in the Helena area. Possible after-hours college credits available to high school students or schedule changes to the H.C. Automotive Course Schedule to accommodate high school students. Success Resource: Possibly and adjunct instructor to teach evening or weekend automotive classes. Resp. Party: Automotive Technology APRC Response: Cabinet Feedback: This is an important opportunity for our automotive program to explore. Dual enrollment interest and student numbers have been increasing each year. Partnerships with our area high schools to offer automotive coursework is a natural pathways to explore.

3	Improve program retention	Key Recommendation: The automotive program will spend time exploring ways to improve retention within the first-year of the program (CAS students) and between the first and second years of the program (AAS students). Rationale: Retention in the automotive program has been challenging for a number of reasons including student misunderstanding of the program goals, industry recruiting students before they have completed a credential, and lack of academic preparation on the part of students. The instructors and Executive Director are motivated to find solutions to help more students retain and earn credentials. Success Target: Helena College's Student Retention Key Performance Indicator for 2022-2023 was 59%. The automotive program has had retention fluctuation in the past five years (ranging from 36%-75%), but we would like to average at least 59% to match the College's goal. Success Strategy: The automotive instructors and the Executive Director of CTE will implement strategies that address some of the identified challenges, which may include a special automotive orientation, a new student information packet, visits to local high schools to talk about the program, as well as a retention-based scholarship. Success Resource: Needed resources include funds for a retention-based scholarship or some form of tuition waiver for students who retain from the first to second year of the auto program. In addition, travel-related funds for the instructors to visit high schools and talk about the automotive program. Resp. Party: Automotive Technology APRC Response: Cabinet Feedback: The program faculty and division director shared strong arguments to support the value add of the second year of the program. We fully support this recommendation as a way to better educate new students about the program so they understand what it is they are studying and why it is important for their careers to have the information gained in the second year of the program.

Section 8: APRC Committee Proposed Determination & Rationale

APRC Proposed Determination:

Continue

APRC Rationale:

There are no concerns about the program's value and commitment to serving students, but program success is dependent on having two full-time faculty. Given that the program had to take a year off, Dave and Stephanie anticipate the program will fill next year. The program has produced a lot of graduates for the Helena and surrounding communities, both Stephanie is committed to keeping the program going. There will be a need to re-build trust in the community, as stopping and starting has caused confusion. People do inquire about the program's future and students are still interested in getting an automotive technology degree. The advisory board is engaged. It may be necessary to re-examine agreements with shops for work-based learning, as it is not always working as intended.

APRC Additional Feedback:

The following questions and topics were discussed at the second APRC meeting with the Executive Director and faculty.

Has the decision to not pursue ASE Certification impacted the program? For example, there was concern that students would be more likely to leave the program early if they can fulfill the one year of employment requirement in their first year of work-based learning. The program was NATEP/ASE certified for approximately 30 years. It was decided to discontinue program certification due to the expense, paperwork burden, and increasingly prescriptive nature of the process. Students are able to take the ASE exams, and the work-based learning provides the required one year of work experience for students to obtain ASE certifications. All certifications are voluntary to obtain for automotive mechanics, though requirements may vary by shop. The bigger impact to retention is competition with employers offering jobs to students before they finish their second year.

One committee member mentioned they have recently heard about efforts by automotive manufacturers to provide vehicles and curriculum to provide high school students with a credential to service their makes (Subaru/Ford) – will this compete with the plans outlined in Recommendation Two? HC used to be a regional training center for Ford and Chrysler, and would receive donated vehicles and training. Those automakers are not as involved anymore. Their plans to donate vehicles to high schools were expressed as a way to get students interested in the trades. This is happening with other trades programs as well, such as the donation of HAAS machines to the high school. There is concern from the faculty and executive director about this trend of training high school students and hiring them at a younger age with less formal training. There is a chance students will seek additional training at places like Helena College later, but it is not certain. This recommendation is an attempt to engage high school students with our automotive program in different activities to encourage them to continue their training at HC, such as by taking related instruction.

The APRC requested clarification on the timeline in Recommendation One. The recommendation states the goal is to hire full-time faculty in the spring of 2025 to start in fall 2025, but the committee noted that the college is currently recruiting an instructor for the program. Are there plans already in place for AY2425? If so, that might be helpful to include in the recommendation. This is also one of the areas where the committee would like to see more discussion of long-term plans. Dave will be teaching the first year of automotive technology in AY2425, and there will not be a second year, as we were unable to offer a first year this year. This is why we definitely need someone in place for next spring, though Perkins funding could be used to hire earlier and have them learn from Dave for a year. Long-term goals are challenging to think about in this situation, though a plan needs to be developed to ensure students who start this fall can complete their two years.
Given that the program had to take a year off, Dave and Stephanie anticipate the program will fill next year. The program has produced a lot of graduates for the Helena and surrounding communities, both Stephanie is committed to keeping the program going. There will be a need to re-build trust in the community, as stopping and starting has caused confusion. People do inquire about the program's future and students are still interested in getting an automotive technology degree. The advisory board is engaged. May need to re-examine agreements with shops for work-based learning, as it is not always working as intended.

Prior to submitting the final draft for Cabinet review, please complete the following in the database:
•Please complete the Market Analysis part of Section 5: Data Review. Data for this can be found on the program data summary Excel file, Market Analysis tab.
•Financial impact/fiscal resources data was added to the Program Data Summary on 2/29, which was posted in the Academic Program Review Team. Please review this information and update the Financial Impact/FTE part of Section 5: Data Review.

Section 9: Dean's Cabinet Feedback

Dean's Cabinet Approval of APRC Determination:

Approve APRC Determination

Overall Cabinet Feedback:

The review was written well and the conversation between the Dean's Cabinet and the department was very beneficial in raising issues that need to be explored in then next five year period. The third recommendation was added through a suggestion that came from the conversation with the Cabinet about the value of the second year of the program.

Section 10: Final Determination for BOR Report

Final Determination for BOR Report:

Continue

Supporting Rationale:

The Automotive Technology program has produced a significant number of graduates for Helena and surrounding communities over the years, its advisory board is engaged, and its value to the college is obvious. The program struggles, however, to retain both faculty and students. Many students earn their CAS in the first year and go to work full-time instead of returning for their second year of the program. A new work-based learning model launched in AY1920, but it has not increased retention as expected.

To address these issues, the program has three goals for the next five years. During the program review process, conversations around the second year of the program reiterated its value. Automotive Technology faculty will explore ways to improve retention within the first year of the program and between the first and second years of the program. A number of strategies to both promote the importance of the AAS and support student success in the second year have already been identified.

While the program has recently filled one vacant instructor position, the other is expected to retire soon and they intend to look for a replacement as soon as possible. This will enable the program to admit new students every fall and provide education needed for all three credentials.

Finally, the program hopes to explore other curriculum delivery and class schedule options to provide opportunities for high school students to attend Automotive Technology courses at the college. Local shops and new dealerships have indicated a shortage in qualified technicians, and young students are more concerned than ever about getting to work in as little time as possible, so the program is looking to collaborate with local high schools, possible with after-hours credits available to high school students or a change to the course schedule.

Given the value of the program to the community and faculty interest in finding creative solutions to the issues facing the program the college has no reservations about continuing the program.

Attached Files

Attachment #	Attachment Title	Attachment URL
57	Data Summary	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=57
58	CT Program Review	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=58
59	Assess Matrix V1	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=59
61	Assess Matrix V1	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=61
62	ITP Curriculum Changes	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=62
63	Annual Work Plan 5-Year Summary	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=63
65	Assess Report	http://hc-curriculum.helenacollege.edu/ViewAttachment.aspx?id=65

Automotive Technology APR 2024

Section 6: Resources

B. Professional development

Dave Jones

- 11/15/23 - Making Sense of Sensors
- 10/18/2023 – Network Communications and Diagnostics
- 9/20/23 - Deciphering Gasoline Turbo Drivability
- 2/4/2023- Heartsaver First Aid and CPR Online and In Person
- 10/4/2023 - Americans with Disabilities Act Overview; FERPA: Confidentiality of Records
- 10/3/2023 - Browser Security Basics; Cybersecurity Overview; Password Security Basics; Protection Against Malware
- 8//24/2022 – Creating a Culture of Inclusion
- 10/27/2022 – Heartsaver CPR and AED Online and In Person

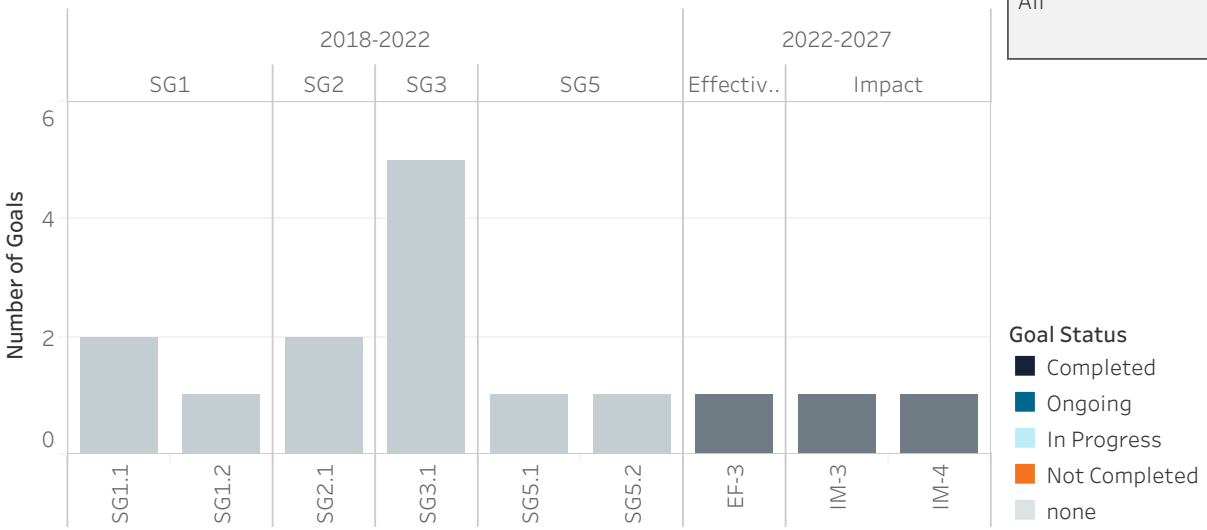
Stephanie Hunthausen

Updated 9/15/2023

Automotive Technology | AY 2018-19 to AY 2022-23

Hover over a data point to see strateigc goal objective or defining characteristic values.
Click on a data point to see the associated action items.

Detailed Strategic Plan Alignment

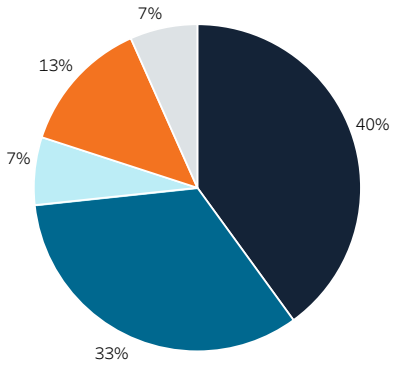


Filter to Year
All

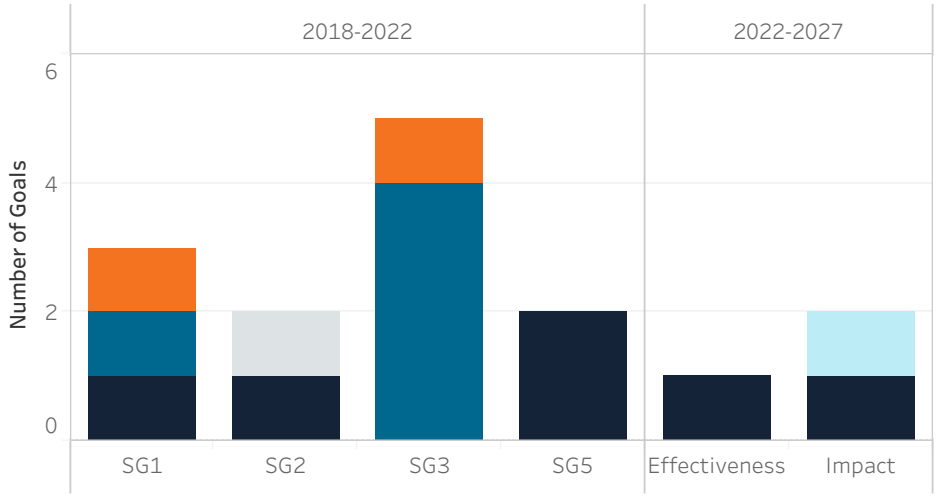
Goal Status
- Completed
- Ongoing
- In Progress
- Not Completed
- none

Overall Goal Status

80% positive progress



Strategic Plan Alignment and Goal Status



AWPs

Area1	Year	Goal #	Sgo/Dc	Action Item1	
Automotive Technology	2018-19	1	SG2.1	To re-certify the Automotive Program with the ASE Education Foundation (formerly NATEF).	none
		2	SG3.1	Automotive faculty, Trades Division Chair, Dean/CEO, Associate Dean of Academic and Student Affairs, President of the MTADA and local automotive dealerships and independent automoti..	Not Comple..
		3	SG1.1	To remove automotive program from moratorium and have at least 10 students enrolled in the fall of 2019.	Not Comple..
	2019-20	1	SG2.1	To re-certify the Automotive Program with the ASE Education Foundation (formerly NATEF).	Comple..
		2	SG3.1	Automotive faculty, Trades Division Chair, Dean/CEO, Associate Dean of Academic and Student Affairs, President of the MTADA and local automotive dealerships and independent automoti..	Ongoing
		3	SG5.1	To remove automotive program from moratorium and have at least 10 students enrolled in the fall of 2019.	Comple..
	2020-21	1	SG3.1	Automotive faculty, Trades Division Chair, Dean/CEO, Associate Dean of Academic and Student Affairs, President of the MTADA and local automotive dealerships and independent automoti..	Ongoing
		2	SG1.1	A grant has been received to expand Hybrid training in the automotive program and for the community. Items will be purchased and curriculum expanded to support this opportunity.	Comple..
		3	SG5.2	The automotive program will procure new diagnostic scanning units, and new hybrid equipment to advance instruction in the automotive program to meet industry standard,	Comple..
	2021-22	1	SG3.1	Automotive faculty, Executive Director of CTE, Dean/CEO, President of the MTADA and local automotive dealerships and independent automotive repair representatives will continue to ..	Ongoing

AWPs

Area1	Year	Goal #	Sgo/Dc	Action Item1	
Automotive Technology	2021-22	2	SG1.2	A new CAS was created last year for the automotive program. It is the goal to have all students, regardless of whether or not they plan to continue to apply for and receive the CAS.	Ongoing
		3	SG3.1	We are going to hold a one week Hybrid-electric vehicle summit. The local independent shops and dealerships will be invited. The workshop will promote hybrid electric vehicle technology along wi..	Ongoing
	2022-23	1	IM-4	Perform vehicle inspections for the community targeting senior citizens and single Moms. Advertise at Senior citizen center and other venues.	Comple..
		2	IM-3	Place props (engines, transmissions, transfer cases, etc.) for student use in wire cages and organize cages by prop types.	In Progress
		3	EF-3	Adopt Electude and Ford ACE online web-based training into second-year Auto courses.	Comple..

AUTO Asssessment Matrix

Note from Bryon

No results.
Auto and Hybrid Veh. had no results.
Hybrid Veh. Does not have any credential outcomes
I would recommend creating credential outcomes, completing mapping for all courses and completing course assessments.

Automotive Technology A.A.S

2022-23 Pathway

Courses	Sequence in Pathway	Last Term Assessed	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7
AST103	1	None							
AST130	1	None							
AST114	1	None							
AST220	2	None							
AST160	2	None							
AST108	2	None							
AST230	3	None							
AST262	3	None							
AST264	3	None							
AST270	4	None							
AST172	4	None							
AST274	4	None							

Outcome 1	Demonstrate safe shop practices and hazardous material handling
Outcome 2	Diagnose and repair automotive electrical systems to NATEF Standard
Outcome 3	Diagnose and repair automotive engine performance, fuel, and emission control systems to NATEF Standard
Outcome 4	Diagnose and repair automotive brakes suspension, and steering systems to NATEF Standard
Outcome 5	Diagnose and repair automotive internal combustion engine systems to NATEF Standard.
Outcome 6	Diagnose and repair automotive powertrain systems (manual and automatic transmission/transaxles and drive axles) to NATEF Standard
Outcome 7	Diagnose and repair automotive heating and air conditioning systems as to NATEF Standard

Observations

No assessed mappings

Unclear which program learning outcomes apply to CAS

Automotive Technology A.A.S

2022-23 Pathway

Courses	Sequence in Pathway	Last Term Assessed	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7
AST103	1	None							
AST130	1	None							
AST114	1	None							
AST220	2	None							
AST160	2	None							
AST108	2	None							

Outcome 1	Demonstrate safe shop practices and hazardous material handling
Outcome 2	Diagnose and repair automotive electrical systems to NATEF
Outcome 3	Diagnose and repair automotive engine performance, fuel, and emission control systems to NATEF Standard
Outcome 4	Diagnose and repair automotive brakes suspension, and steering
Outcome 5	Diagnose and repair automotive internal combustion engine systems
Outcome 6	Diagnose and repair automotive powertrain systems (manual and
Outcome 7	Diagnose and repair automotive heating and air conditioning

Observations
No assessed mappings
Unclear which program learning outcomes apply to CAS

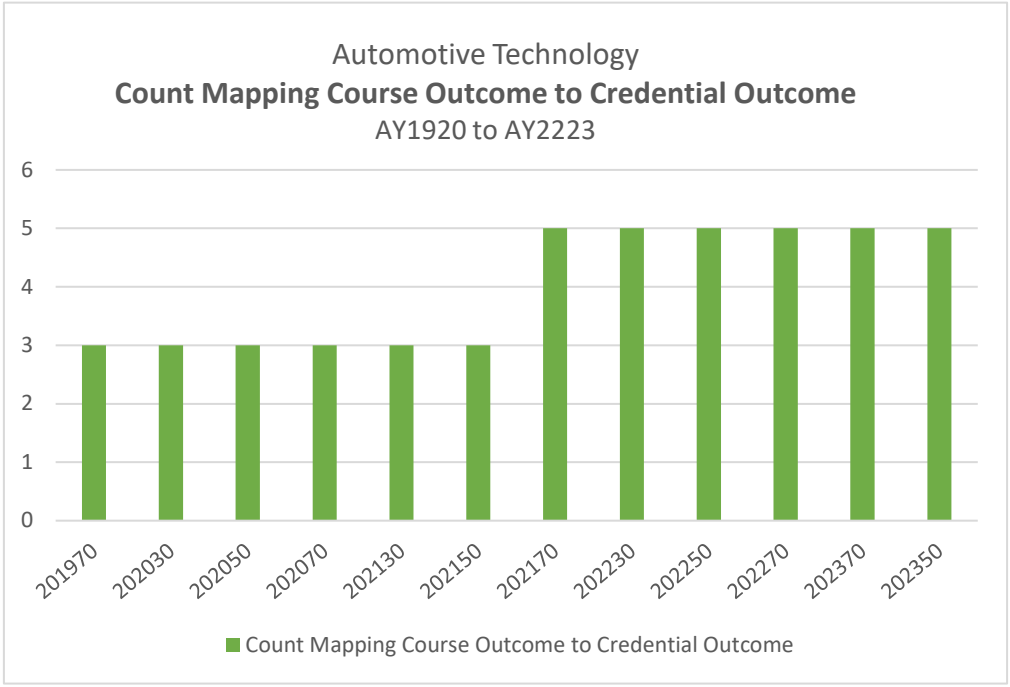
Hybrid Vehicle Service Technology CTS
2022-23 Pathway?

Courses
AST130
AST160
AST230
AST262
AST274

Learning Outcome Mapping

Automotive Technology AY1920 to AY2223

TermCode	Count Mapping Course Outcome to Credential Outcome
201970	3
202030	3
202050	3
202070	3
202130	3
202150	3
202170	5
202230	5
202250	5
202270	5
202370	5
202350	5



Assessments Completed by Term

Automotive Technology AY1920 to AY2223

Term Code	Count Planned Assmnts	Count Term Assmnts	Count Complete Term Assmnts	Percent Complete Term Assmnts	Count Section Assmnts	Count Complete Section Assmnts	Percent Complete Section Assmnts
201930	0	0	0	0%	0	0	0%
201970	0	0	0	0%	0	0	0%
202030	0	0	0	0%	0	0	0%
202070	0	0	0	0%	0	0	0%
202130	10	3	0	0%	3	2	67%
202170	17	14	0	0%	14	0	0%
202230	17	0	0	0%	0	0	0%
202270	17	14	0	0%	14	0	0%
202330	17	3	0	0%	3	0	0%
Average	**16**	**7**	**0**	**0%**	**7**	**0**	**13%**

Average excludes terms with 0 assessments

Definitions	
Planned Assessment	Assessment planned, can be reused each term until inactivated
Term Assessment	All section assessments roll up into one term assessment
Section Assessment	Assessment administered in one section (may have more than one section assessment if more than one section taught in a semester, will roll into one term assessment)
Complete Assessment	Assessment administered and results entered in database. All section assessments must be completed in order for term assessment to be marked complete

Assessments Meeting Target

Automotive Technology AY1920 to AY2223

Assessment Activity by Term

Row Labels	Sum of Count Term Assessment	Sum of Count Term Assessment Met Target	Average of Term Assessment Percent Complete	Average of Term Assessment Percent Met Target
201970	0	0	0%	0%
202030	0	0	0%	0%
202070	0	0	0%	0%
202130	3	0	0%	0%
202170	14	0	0%	0%
202230	0	0	0%	0%
202270	14	0	0%	0%
202330	3	0	0%	0%
Grand Total	**34**	**0**	**0%**	**0%**

Assessment Activity by Course - All Courses

Row Labels	Sum of Count Term Assessment	Sum of Count Term Assessment Met Target	Average of Term Assessment Percent Complete	Average of Term Assessment Percent Met Target
AST103	16	0	0%	0%
AST108	0	0	0%	0%
AST114	0	0	0%	0%
AST130	12	0	0%	0%
AST160	0	0	0%	0%
AST172	0	0	0%	0%
AST220	0	0	0%	0%
AST230	0	0	0%	0%
AST262	0	0	0%	0%
AST264	0	0	0%	0%
AST270	0	0	0%	0%
AST274	6	0	0%	0%
Grand Total	**34**	**0**	**0%**	**0%**

Assessment Activity by Course - All Courses with Term Assessments

Count Term Ass (Multiple Items)

Row Labels	Sum of Count Term Assessment	Sum of Count Term Assessment Met Target	Average of Term Assessment Percent Complete	Average of Term Assessment Percent Met Target
AST103	16	0	0%	0%
AST130	12	0	0%	0%
AST274	6	0	0%	0%
Grand Total	**34**	**0**	**0%**	**0%**

Summary of Curriculum Changes

Automotive Technology AY1819 to AY2223

Count of ShortName	AY			
Type of Change	1819	1920	2021	Grand Total
Curriculum Revision	1	12	12	25
New Course	3			3
Grand Total	**4**	**12**	**12**	**28**

All Curriculum Change Activity

Automotive Technology AY1819 to AY2223

Curriculum Change Author	Signature	FullName	ShortName	Category	AY	Creation Date	Status
Heinitz, Melanie	Melanie Heinitz	New Course: AST114 Automotive	New Course: AST114	New Course	1819	4/12/2019	Completed
Heinitz, Melanie	Melanie Heinitz	New Course: AST118 Brakes and	New Course: AST118	New Course	1819	4/12/2019	Completed
Heinitz, Melanie	Melanie Heinitz	New Course: AST220 Automotive Steering and Suspension	New Course: AST220	New Course	1819	4/12/2019	Completed
Heinitz, Melanie	Melanie Heinitz	Curriculum revision for AUTOMOTIVE ENGINE REPAIR	Revision to AST160	Curriculum Revision	1819	6/27/2019	Completed
Heinitz, Melanie	Melanie Heinitz	Curriculum revision for ENGINE PERFORMANCE I	Revision to AST262	Curriculum Revision	1920	7/3/2019	Completed
Heinitz, Melanie	Melanie Heinitz	Curriculum revision for ENGINE PERFORMANCE II	Revision to AST264	Curriculum Revision	1920	7/3/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for Automotive Steering and Suspension	Revision to AST220	Curriculum Revision	1920	11/18/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for Automotive	Revision to AST114	Curriculum Revision	1920	11/18/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for ENGINE PERFORMANCE I	Revision to AST262	Curriculum Revision	1920	11/18/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for ENGINE PERFORMANCE II	Revision to AST264	Curriculum Revision	1920	11/18/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for AUTOMATIC TRANSMISSIONS/TRANSAXLES	Revision to AST270	Curriculum Revision	1920	11/18/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for AUTOMOTIVE HEATING/AIR	Revision to AST172	Curriculum Revision	1920	11/18/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for INTRODUCTION TO HYBRID	Revision to AST274	Curriculum Revision	1920	11/18/2019	Completed
Heinitz, Melanie	Dave Jones	Curriculum revision for MANUAL DRIVETRAINS	Revision to AST108	Curriculum Revision	1920	12/9/2019	Completed
Jones, Dave	Dave Jones	Curriculum revision for AUTOMOTIVE MECHANICS CORE	Revision to AST103	Curriculum Revision	1920	4/10/2020	Completed
Jones, Dave	Dave Jones	Curriculum revision for AUTOMATIC TRANSMISSIONS/TRANSAXLES	Revision to AST270	Curriculum Revision	1920	4/10/2020	Completed

Curriculum Change Author	Signature	FullName	ShortName	Category	AY	Creation Date	Status
Stewart, Jerry	Jerry Stewart	Curriculum revision for INTRODUCTION TO AUTOMOTIVE	Revision to AST130	Curriculum Revision	2021	1/9/2021	Completed
Stewart, Jerry	Jerry Stewart	Curriculum revision for AUTOMOTIVE ENGINE REPAIR	Revision to AST160	Curriculum Revision	2021	1/19/2021	Completed
Stewart, Jerry	Jerry Stewart	Curriculum revision for MANUAL DRIVETRAINS	Revision to AST108	Curriculum Revision	2021	1/19/2021	Completed
Stewart, Jerry	Jerry Stewart	Curriculum revision for Automotive	Revision to AST114	Curriculum Revision	2021	1/19/2021	Completed
Stewart, Jerry	Jerry Stewart	Curriculum revision for AUTOMOTIVE MECHANICS CORE	Revision to AST103	Curriculum Revision	2021	1/21/2021	Completed
Stewart, Jerry	Jerry Stewart	Curriculum revision for Automotive Steering and Suspension	Revision to AST220	Curriculum Revision	2021	1/21/2021	Completed
Jones, Dave	Dave Jones	Curriculum revision for AUTOMOTIVE HEATING/AIR	Revision to AST172	Curriculum Revision	2021	1/30/2021	Completed
Jones, Dave	Dave Jones	Curriculum revision for ELECTRICAL/ELECTRONIC SYSTEMS	Revision to AST230	Curriculum Revision	2021	1/30/2021	Completed
Jones, Dave	Dave Jones	Curriculum revision for ENGINE PERFORMANCE I	Revision to AST262	Curriculum Revision	2021	1/30/2021	Completed
Jones, Dave	Dave Jones	Curriculum revision for ENGINE PERFORMANCE II	Revision to AST264	Curriculum Revision	2021	1/30/2021	Completed
Jones, Dave	Dave Jones	Curriculum revision for AUTOMATIC TRANSMISSIONS/TRANSAXLES	Revision to AST270	Curriculum Revision	2021	1/30/2021	Completed
Jones, Dave	Dave Jones	Curriculum revision for INTRODUCTION TO HYBRID	Revision to AST274	Curriculum Revision	2021	1/30/2021	Completed

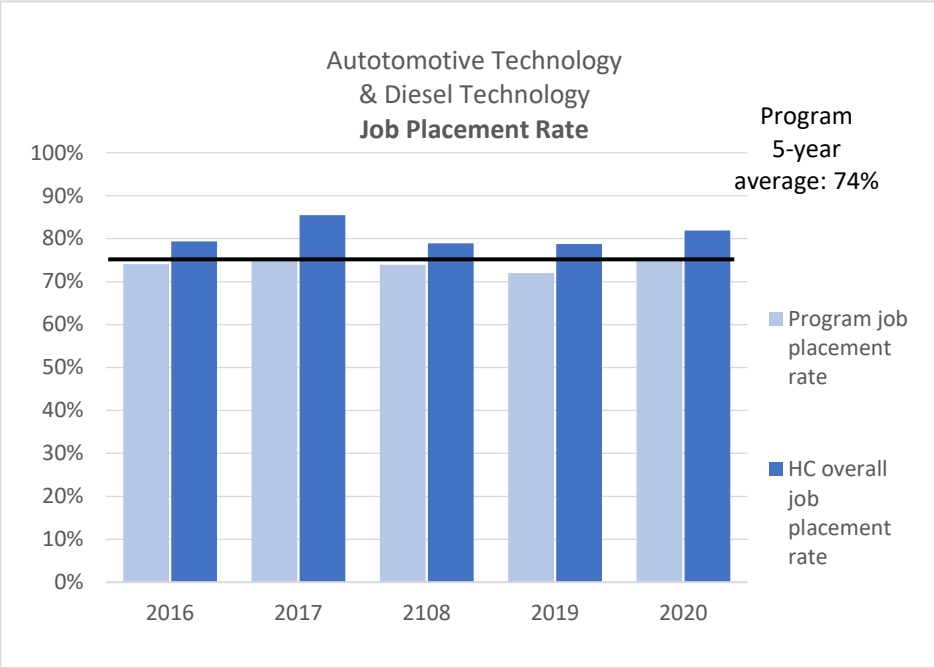
Program Review Data Summary - AUTOMOTIVE TECHNOLOGY									AY 2018-19 to AY 2022-23
Market Analysis - All Credentials									
Metric	**Current MT (2020)**	**Projected MT (2030)**	**Annual Projected MT**	**Current U.S. (2022)**	**Projected U.S. (20302)**	**Annual Projected U.S.**		**Program Notes**	**Source**
Job openings from related occupations	3,310	3,420	340	799,800	801,200	69,000		See "Occupations" and "Career Data" tabs	Career OneStop, U.S. Dept. of Labor
Percent change in job openings for related occupations		3%			-4%				Career OneStop, U.S. Dept. of Labor
Median hourly wage/annual salary for related occupations	$57,8377 annual	$27.81 hourly		$45,067 annual	$25.99 hourly				Career OneStop, U.S. Dept. of Labor

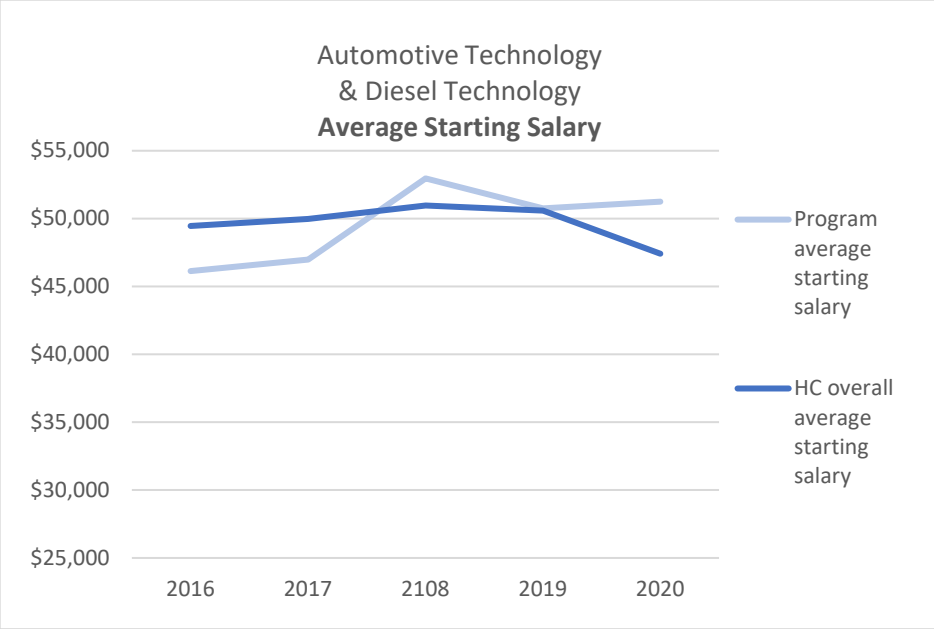
Program Data - All Credentials									
Metric	**2016**	**2017**	**2108**	**2019**	**2020**	**5-Year Avg**	**% Change 5 Years**	**Program Notes**	**Source**
Program job placement rate	74%	75%	74%	72%	75%	74%	1%	Students employed in Montana 1 year after graduation; Includes both auto and diesel*	MUS Student Success Dashboard (Student Success in Workforce tab)
HC overall job placement rate	79%	86%	79%	79%	82%	81%	2%	Students employed in Montana 1 year after graduation	MUS Student Success Dashboard (Student Success in Workforce tab)
Program average starting salary	$46,134	$46,990	$52,961	$50,761	$51,247	$49,619	11%	Average for all program graduates 1 year after graduation; includes both auto and diesel*	MUS Student Success Dashboard (Student Success in Workforce tab)
HC overall average starting salary	$49,454	$49,977	$50,965	$50,580	$47,414	$49,678	-4%	Average for all graduates 1 year after graduation	MUS Student Success Dashboard (Student Success in Workforce tab)

Completed 11/27/2023

*Discipline: Mechanic and repair technologies/technicians

*Major area: Vehicle Maintenance and Repair Technologies





(CIP 47)
s/technicians (CIP 47.06)

Program Review Data Summary - Automotive Technology **AY 2018-19 to AY 2022-23**

Enrollment

Program Capacity	AY 1819	AY 1920	AY 2021	AY 2122	AY 2223	5-Yr Avg	5-Yr Trd	Notes	Source
Automotive Technology AAS	30	30	30	30	30	30	0%		Institutional Research
Automotive Technology CAS					10	10			Institutional Research
Automotive Technology Overall	30	30	30	30	40	32	33%		Institutional Research
Helena College									Institutional Research

Unduplicated Annual Enrollment	AY 1819	AY 1920	AY 2021	AY 2122	AY 2223	5-Yr Avg	5-Yr Trd	Notes	Source
Automotive Technology AAS	10	18	24	18	18	18	80%		Institutional Research
Automotive Technology CAS					10	10			Institutional Research
Automotive Technology Overall	10	18	24	18	28	20	180%		Institutional Research
Helena College	1,906	1,797	1,730	1,845	1,815	1819	-5%		Institutional Research

Percent Program Capacity	AY 1819	AY 1920	AY 2021	AY 2122	AY 2223	5-Yr Avg	5-Yr Trd	Notes	Source
Automotive Technology AAS	33%	60%	80%	60%	60%	59%	27%		Institutional Research
Automotive Technology CAS					100%	100%	100%		Institutional Research
Automotive Technology Overall	33%	60%	80%	60%	70%	61%	37%		Institutional Research
Helena College									Institutional Research

Average Annual FTE	AY 1819	AY 1920	AY 2021	AY 2122	AY 2223	5-Yr Avg	5-Yr Trd	Notes	Source
Automotive Technology AAS	7	14	23	19	15	15.6	114%		Institutional Research
Automotive Technology CAS					11	11			Institutional Research
Automotive Technology Overall	7	14	23	19	27	18	286%		Institutional Research
Helena College	805	747	658	659	674	708.6	-16%		Institutional Research

Retention									
Entering cohort	**Fall 18**	**Fall 19**	**Fall 20**	**Fall 21**	**Fall 22**	**5-Yr Avg**	**5-Yr Trd**	**Notes**	**Source**
Automotive Technology AAS	1	14	12	8	11	9	1000%	New, readmit, and transfer	Institutional Research
Automotive Technology CAS					10	10		New, readmit, and transfer	Institutional Research
Automotive Technology Overall	1	14	12	8	21	11	2000%	New, readmit, and transfer	Institutional Research
Helena College	342	365	229	315	295	309	-14%	New, readmit, and transfer	Institutional Research

Retention Rate	**Fall 18**	**Fall 19**	**Fall 20**	**Fall 21**	**Fall 22**	**5-Yr Avg**	**5-Yr Trd**	**Notes**	**Source**
Automotive Technology AAS	0%	43%	75%	63%	36%	43%	36%	Fall to fall, retained in credential	Institutional Research
Automotive Technology CAS					80%	80%		Fall to spring, retained in credential	Institutional Research
Automotive Technology Overall	0%	43%	75%	63%	57%	48%	57%	Fall to fall, retained in program or completed	Institutional Research
Helena College	56%	55%	54%	51%	58%	55%	2%	Fall to fall, retained at HC	Institutional Research

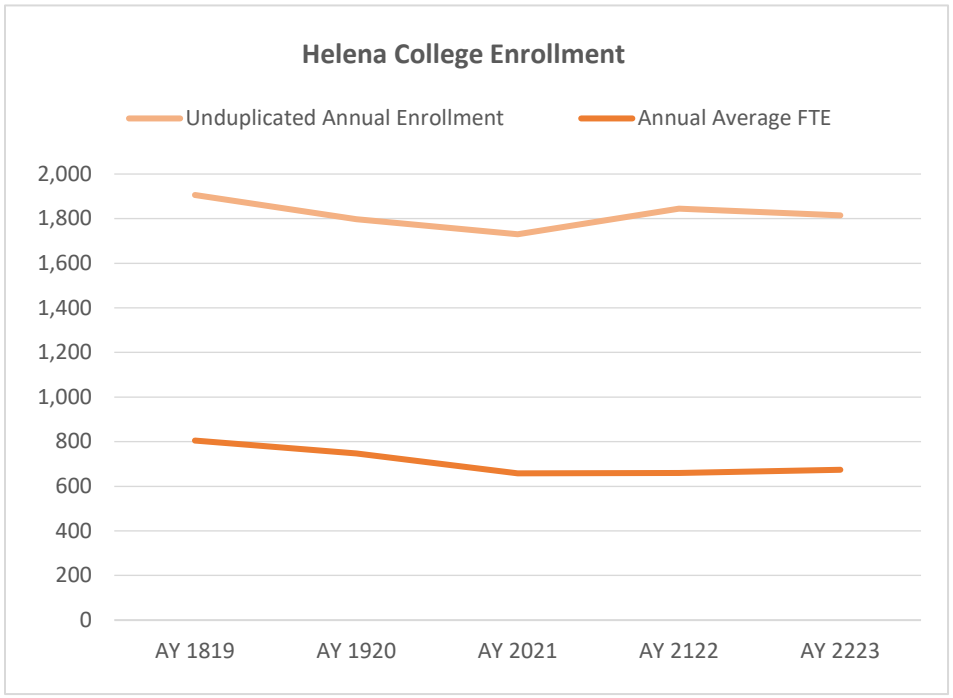
Course Completion Rate									
	AY 1819	**AY 1920**	**AY 2021**	**AY 2122**	**AY 2223**	**5-Yr Avg**	**5-Yr Trd**	**Notes**	**Source**
Automotive Technology 1st Year		79%	93%	86%	95%	88%	16%	All courses required for first year of credential, excluding gen eds	Institutional Research
Automotive Technology 2nd Year	92%		78%	96%	63%	82%	-29%	All courses required for second year of credential, excluding gen eds	Institutional Research
Automotive Technology Overall	96%	79%	86%	89%	90%	88%	-6%	All coures requied for either credential, excluding gen eds	Institutional Research
Helena College	85%	87%	86%	81%	86%	85%	1%		Institutional Research

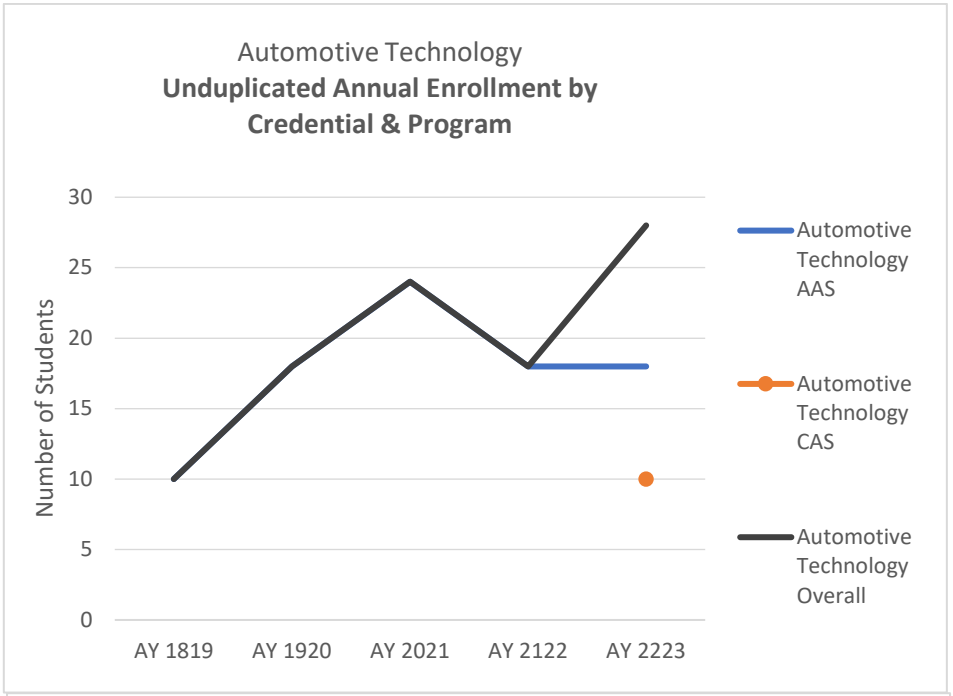
Completions									
Degrees/Certificates Awarded	**AY 1819**	**AY 1920**	**AY 2021**	**AY 2122**	**AY 2223**	**5-Yr Avg**	**5-Yr Trd**	**Notes**	**Source**
Automotive Technology AAS	5	0	6	6	1	3.6	-80%	Duplicated	Institutional Research
Automotive Technology CAS		0	0	7	13	5		Duplicated	Institutional Research
Automotive Technology Overall	5	0	6	13	14	7.6	180%	Duplicated	Institutional Research
Helena College	313	243	215	210	242	244.6	-23%	Duplicated	Institutional Research

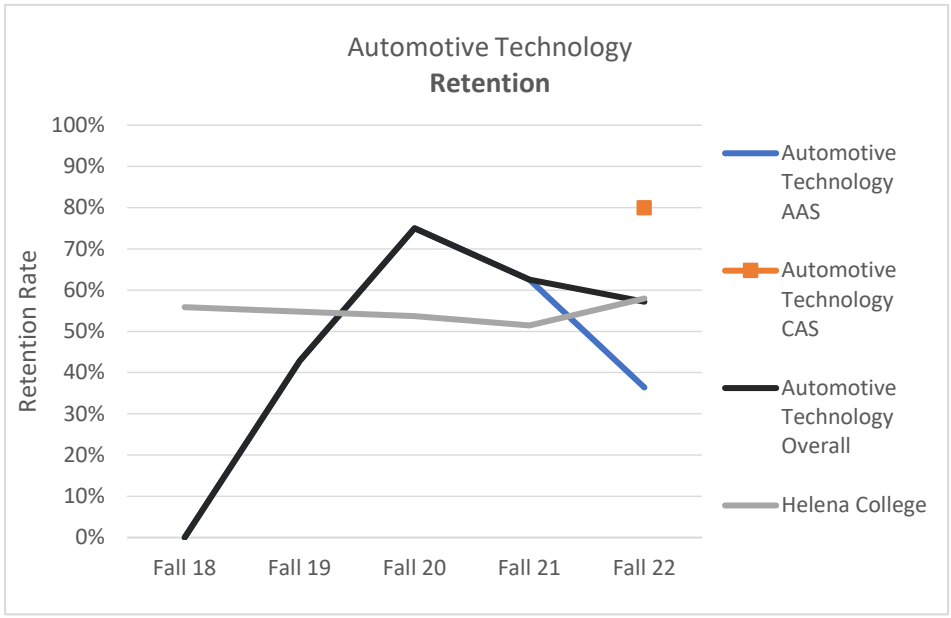
Degree Production Rate	**AY 1819**	**AY 1920**	**AY 2021**	**AY 2122**	**AY 2223**	**5-Yr Avg**	**5-Yr Trd**	**Notes**	**Source**
Automotive Technology AAS	71.4	0.0	26.1	31.6	6.7	27.2	-91%		Institutional Research
Automotive Technology CAS					118.2	118.2			Institutional Research
Automotive Technology Overall	71.4	0.0	26.1	68.4	51.9	43.6	-27%		Institutional Research
Helena College	38.9	32.5	32.7	31.9	35.9	34.4	-8%	Number of degrees awarded (duplicated) for 100 AAFTE	Institutional Research

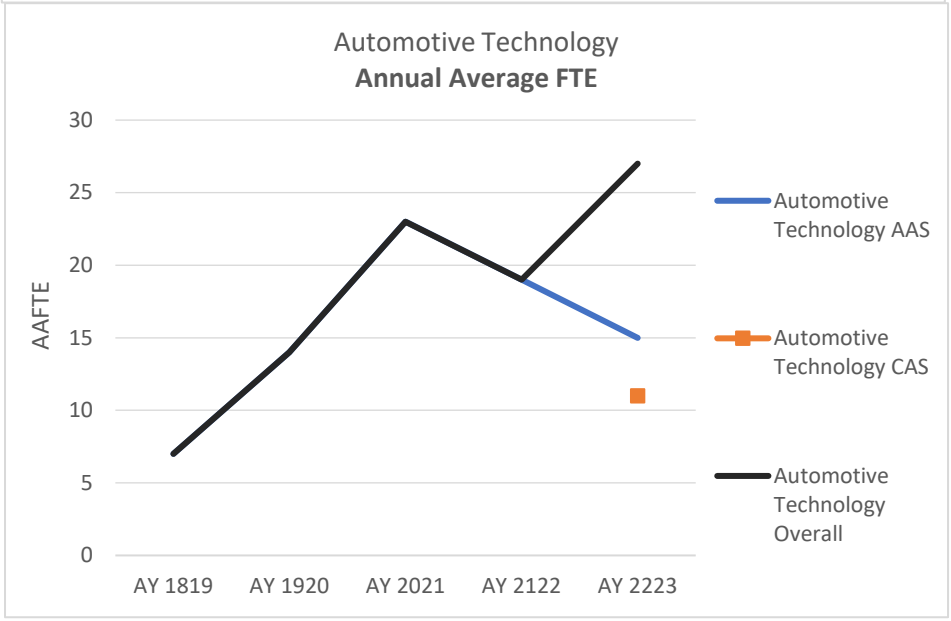
150% Graduation Rate	**Fall 2016**	**Fall 2017**	**Fall 2018**	**Fall 2019**	**Fall 2020**	**5-Yr Avg**	**5-Yr Trd**	**Notes**	**Source**
Automotive Technology Overall	67%	50%	100%	21%	58%	59%	-8%	Entering students in program graduating within 3 years; no entering CAS students in reporting period	Institutional Research
Helena College	28%	32%	35%	33%	32%	32%	4%		Institutional Research

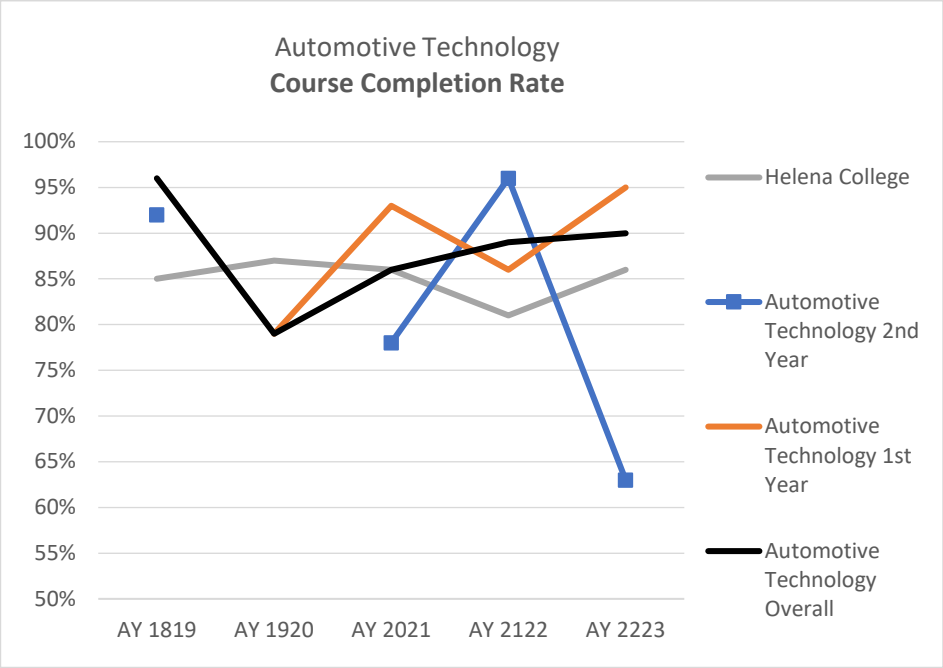
Completed 11/29/2023

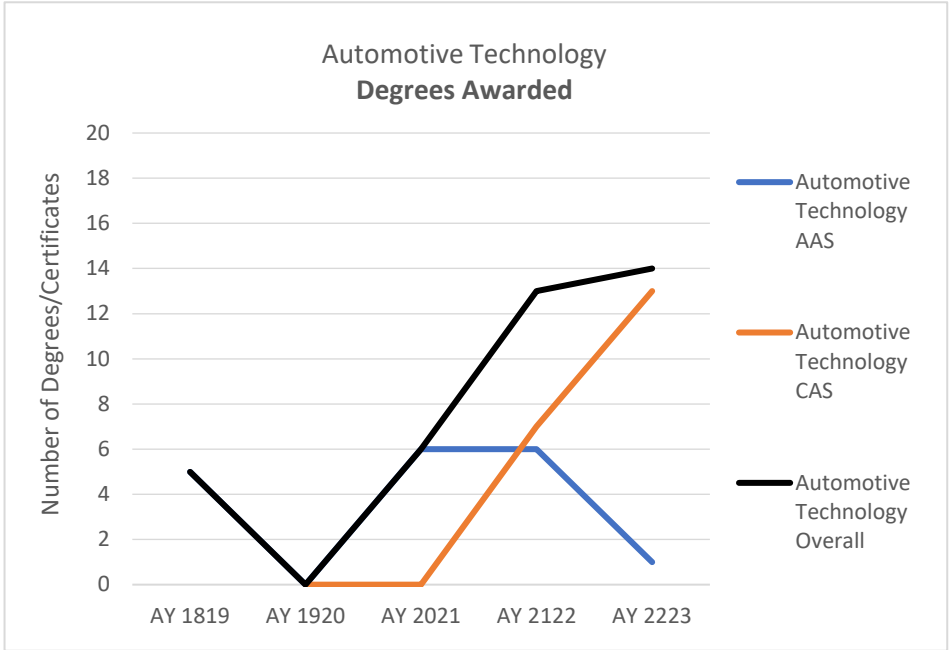

Helena College Enrollment
Unduplicated Annual Enrollment
Annual Average FTE
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
AY 1819
AY 1920
AY 2021
AY 2122
AY 2223

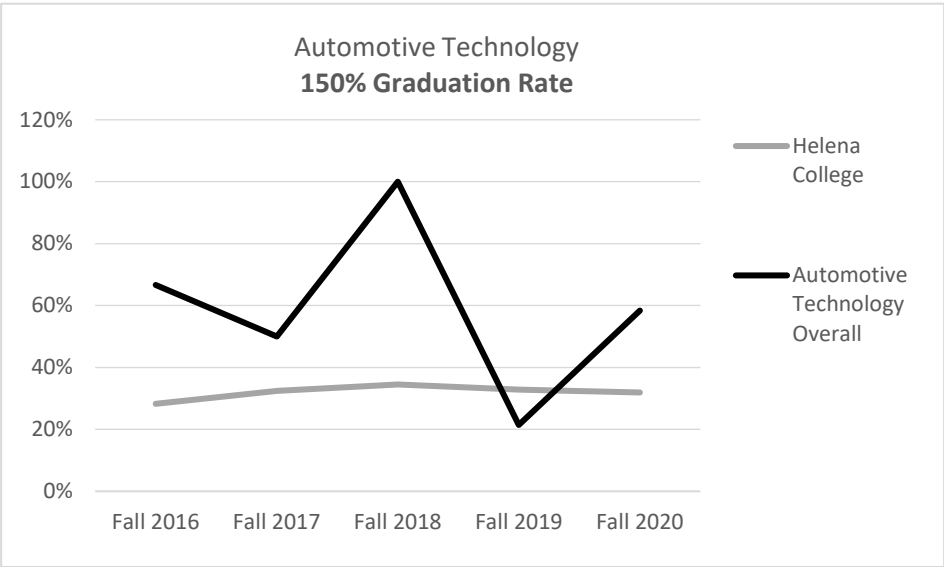

Automotive Technology
Unduplicated Annual Enrollment by Credential & Program
Number of Students
30
25
20
15
10
5
0
AY 1819
AY 1920
AY 2021
AY 2122
AY 2223
Automotive Technology AAS
Automotive Technology CAS
Automotive Technology Overall

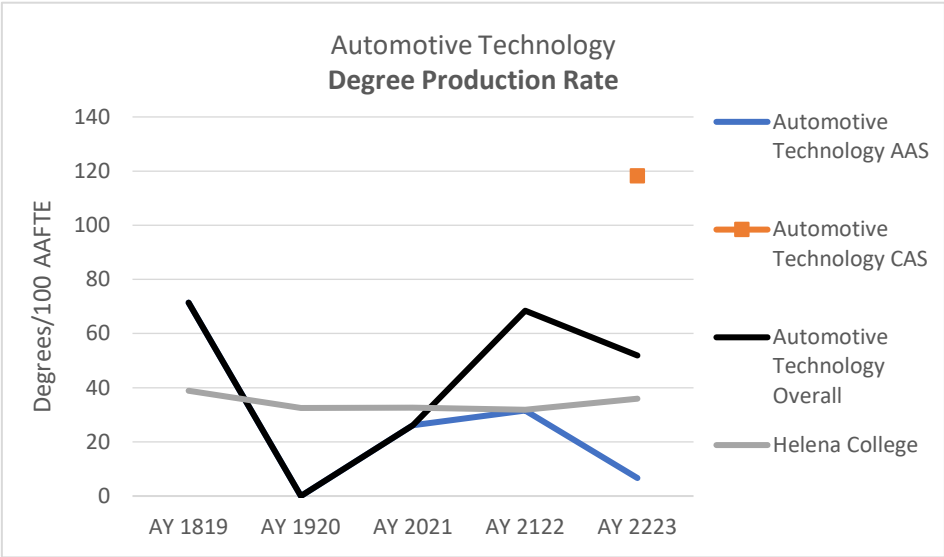

Automotive Technology
Retention
Retention Rate
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Fall 18
Fall 19
Fall 20
Fall 21
Fall 22
Automotive Technology AAS
Automotive Technology CAS
Automotive Technology Overall
Helena College


Automotive Technology
Annual Average FTE
AAFTE
30
25
20
15
10
5
0
AY 1819
AY 1920
AY 2021
AY 2122
AY 2223
Automotive Technology AAS
Automotive Technology CAS
Automotive Technology Overall


Automotive Technology
Course Completion Rate
100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
AY 1819
AY 1920
AY 2021
AY 2122
AY 2223
Helena College
Automotive Technology 2nd Year
Automotive Technology 1st Year
Automotive Technology Overall


Automotive Technology
Degrees Awarded
Number of Degrees/Certificates
20
18
16
14
12
10
8
6
4
2
0
AY 1819
AY 1920
AY 2021
AY 2122
AY 2223
Automotive Technology AAS
Automotive Technology CAS
Automotive Technology Overall


Automotive Technology
150% Graduation Rate
120%
100%
80%
60%
40%
20%
0%
Fall 2016
Fall 2017
Fall 2018
Fall 2019
Fall 2020
Helena College
Automotive Technology Overall


Automotive Technology
Degree Production Rate
Degrees/100 AAFTE
140
120
100
80
60
40
20
0
AY 1819
AY 1920
AY 2021
AY 2122
AY 2223
Automotive Technology AAS
Automotive Technology CAS
Automotive Technology Overall
Helena College

Program Review Data Summary - Automotive Technology

Definitions

Term	Abbreviation	Use	Defintion	Source	Date added/ updated	Program Data Summary
150% graduation rate		Standard	Percentage of students graduating within 150% of normal time to completion for the degree.		10/19/2022	x
Academic Year	**AY**	Standard	Summer, fall, and spring terms (e.g. AY 2020-21 includes summer 2020, fall 2020, and spring 2021)	MUS Enrollment Reporting Procedures		x
Annual average full-time equivalent	**AAFFTE**	Standard	Calculated in the following way: (Fall Official FTE + Summer Official FTE + Spring Official FTE)/2. See also **Full-time equivalent.**	MUS Enrollment Reporting Procedures	3/17/2022	x
Calendar Year	**CY**	Standard	One year from January to December		10/19/2022	x
Cohort		Standard/IPEDS	A specific group of students established for tracking purposes.	IPEDS Glossary	3/17/2022	x
Course completion rate		Standard	Percent of students earning a passing grade in a course. May also be counted as credit hours. Does not include incompletes, audits, or missing grades. See also **Pass**.		3/17/2022	x
Credential course completion rate		Standard	Percent of students earning a passing grade in a course required for a credential. Incompletes, audits, and missing grades are not included.		10/19/2022	x
Degree production per 100 AAFTE		Standard	Number of degrees awarded in an academic year divided by the AAFTE for the same year, multiplied by 100. Allows for longitudunial comparison of degrees awarded while taking into account changes in enrollment. Also called "degree production rate"		3/17/2022	x
Degree production rate		Standard	Number of degrees awarded in an academic year divided by the AAFTE for the same year, multiplied by 100. Allows for longitudunial comparison of degrees awarded while taking into account changes in enrollment. Also called "degree production per 100 AAFTE."		10/19/2022	x

Definitions						
Entering cohort		HC	All new first-time, transfer in, and readmit/returning students, usually in a fall semester.		12/8/2023	x
Expenditure/Completion		HC	Program expenses (personnel, operating, and adjunct salaries) divided by number of degrees awarded for the academic year		10/19/2022	x
Expenditure/FTE		HC	Program expenses (personnel, operating, and adjunct salaries) divided by FTE for the academic year		10/19/2022	x
Fiscal Year	**FY**	Standard	One year as defined for financial reporting, from July 1 to June 3		10/19/2022	x
Full-time equivalent	**FTE**	Standard	Calculated for a term by dividing total credit hours earned at the end of term (**EOT**) by 15.	MUS Enrollment Reporting Procedures	3/17/2022	x
Headcount		Standard	Count of students. See also **Unduplicated or duplicated.**		12/8/2023	x
Job placement rate		MUS, HC	Percent of graduates employed in Montana in the first year after graduation	Montana University System Student Success Dashboard	12/8/2023	x
Pass		Standard	Grade of Pass or minimum letter grade of C-		3/17/2022	x
Percent program capacity		Standard	Calculation = (Unduplicated Annual Enrollment) / (**Program Capacity**)		10/19/2022	x
Program capacity		Standard	Maximum number of students a program can accommodate in one academic year (first year maximum + second year maximum)	Program records	10/19/2022	x
Retention		Standard	Precentage of fall entering cohort returning for either the subsequent spring or subsequent fall semseter. May also be percentage of spring entering cohort returning for subsequent fall or spring semesters (less common)		12/8/2023	x
Unduplicated		Standard	Each student is counted only once (count of unique students)		3/17/2022	x