

AUTOMOTIVE SERVICE TECHNOLOGY

Associate of Applied Science Degree

20601

Advisor: Lloyd Adams

EAC supports ASE certification of technicians.

The Automotive Service Technology degree provides an opportunity for all students to develop and upgrade skills needed to be productive and successful upon entry into several automotive service and repair occupations.

Additionally, this program develops the career skills necessary for an individual to move into sales, business management, or supervisory positions. The Automotive Service Technology program is recognized for its high level of achievement by meeting local and national industry standards. The degree course work will help prepare students for ASE certification tests.

Program Learning Outcomes

1. Demonstrate the ability to properly repair various mechanical issues on vehicle engines, steering and suspension systems, electrical systems, brake systems, manual drivetrain systems, automatic transmissions, and computerized vehicle systems."
2. Demonstrate the ability to diagnose common drivability concerns related to vehicle engines, steering and suspension systems, electrical systems, brake systems, manual drivetrain systems, automatic transmissions, and computerized vehicle systems.
3. Demonstrate an ability to follow strategic, diagnostic routines while diagnosing & repairing vehicle engines, steering and suspension systems, manual drivetrain systems, automatic transmissions, brake systems, electrical systems, and engine performance systems.
4. Demonstrate vehicle system foundation knowledge by successfully passing each subject's ASE students certification examinations given by program proctor.
5. Demonstrate knowledge in the use and application of both printed and web-based repair and service information.
6. Demonstrate an ability to properly use both PC-based and handheld computerized diagnostic equipment.
7. Demonstrate ability to safely and properly use automotive hand tools and lift equipment.
8. Apply work professionalism habits in the work environment (being punctual, dependable, and following instructions).

Curriculum Requirements

AUT 105	Automotive Electrical Fundamentals	2 credits
AUT 106	Internal Combustion Engines	4 credits
AUT 107	Automotive Electrical Systems and Equipment	2 credits
AUT 110	Fuel and Emission Systems	2 to 3 credits
AUT 120	Manual Transmission and Drive Train	3 credits
AUT 131	Steering and Suspension Systems	3 credits
AUT 132	Automotive Brake Systems	2 credits
AUT 180	Automotive Service Techniques <u>OR</u>	
AUT 101	Introduction to Automotive Technology	2 to 4 credits
AUT 220	Automotive Electronics and Computerized Vehicle Controls	2 credits
AUT 230	Automatic Transmissions	4 credits
AUT 260	Vehicle Performance and Diagnosis	3 credits
AUT 266	Vehicle Heating and Air Conditioning	3 credits
AUT 280	Advanced Shop	4 credits

CMP 101	Introduction to Computers <u>OR</u>	
CMP 103	Introduction to Computer Based Systems	3 credits
Total Curriculum Requirements		39-42 credits

Curriculum Related Requirements

In addition to the required courses above, select from the following Curriculum Related courses to complete a total of 45 curriculum credits:

AMT 101	Fundamentals of Machining	3 credits
AMT 104	Machining and Fabrication	3 credits
AMT 110	Introduction to Fab Lab Technology	2 credits
AUT 150	Automotive Painting and Refinishing	3 credits
AUT 297	Workshop <u>OR</u>	
AUT 299	Independent Study	1 to 3 credits
COE 101	Job Seeking Strategies	2 credits
COE 111	Cooperative Education I (Occupational)	1 to 4 credits
SBM 110	Introduction to Entrepreneurship	3 credits
SBM 231	Business Planning	1 credit
TEC 112	Basic Hydraulics and Pneumatics	3 credits
WLD 101	Welding	3 credits
WLD 108	Welding and Metal Fabrication	3 credits
WLD 124	MIG Welding	3 credits
WLD 126	TIG Welding	3 credits
WLD 201	Repair Welding and Fabrication	3 credits
Total Curriculum Related Requirements		3-6 credits

General Education Requirements

Quantitative Reasoning

BUS 111	Business Mathematical Calculations <u>OR</u>	
MAT 100	Applied Mathematics or higher	3-5 credits

Written and Oral Communication

ENG 100	Writing Fundamentals or higher <u>OR</u>	
BUA 259	Business Communications	3 credits

Select a sufficient number of credits from the list of General Education courses in the General Education AAS Degree section of the catalog to obtain the 15-credits required.

Total General Education Requirements **15 credits**

Courses listed in Curriculum Requirements that qualify for General Education credit (see the General Education section of the catalog) may fulfill both General Education and Curriculum Requirements unless General Education Requirements are specified in the major.

Total Minimum Degree Requirements **60 credits**