

AUTOMOTIVE TECHNOLOGY: MANUFACTURE SPECIALTY (A.S.)

ASSOCIATE OF SCIENCE

The Manufacture Specialty AS option prepares students for employment as an entry-level automotive technician at a Ford dealership. Courses focus on both the mechanical and electrical systems within a vehicle and how to diagnose and repair them. They include fundamentals, engine repair, automatic transaxle/transmission, manual drivetrain and axle, suspension and steering, brakes, electrical, HVAC, and engine performance. Students will also increase their hands-on skills and experience by working in the field. Graduates are employed as entry-level technicians at Ford dealerships. They have the ability to work as a bumper-to-bumper technician or as a specialized automotive repair technician.

Program Student Learning Outcomes

- Demonstrate safe practices when working on all types of vehicles.
- Analyze service information in order to diagnose and repair vehicle faults.
- Practice repairing faults related to engine repair, automatic transmission/transaxle, manual drivetrain and axle, suspension and steering, brakes, electrical/electronics, HVAC, and engine performance.

Program Requirements

Code Number	Course Title	Units
Required Courses		
AUTO 151	Automotive Alignment Brake and Suspension	6.5
AUTO 161	Automotive Electricity	7.0
AUTO 111	Automotive Engines	4.0
AUTO 121	Drivetrain Transmissions and Axles	6.5
AUTO 181	Electronic Engine Management Systems-Corporate	6.5
AUTO 179	Automotive Air Conditioning	4.0
AUTO 173	Automotive Technology Work Experience Education (Students must repeat this course for 12 units) ¹	12.0
Total Units		46.5

¹ This course must be repeated four times. AUTO 100 can substitute (3) units of AUTO 173

Recommended Electives

Code Number	Course Title	Units
WELD 100	Welding Fundamentals	2.5
MTT 100	Machine Tool Introduction	2.0
BCOT 247	Managerial Business Communications	3.0
BCOT 148	Effective Business Presentations	3.0

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

Complete 60 units to include (1) the above required courses, (2) Complete the General Education requirements and electives to achieve a minimum of 60 units.