AUTOMOTIVE SERVICE TECHNOLOGY

Applied Science and Engineering Technology Division

The associate of applied science degree with specialization in automotive service technology is structured to provide the technical knowledge and mechanical abilities necessary to work on the vehicles of yesterday, today and the future. Today's vehicles are highly complex feats of engineering. Technicians need a wide array of skills and knowledge to diagnose, repair and maintain these vehicles. Automotive service technicians have the opportunity to work on hydraulic systems (brakes and transmissions), mechanical systems (engines and steering), computer systems (modules and networks) and electrical systems (entertainment and lighting). All of these systems work together to ensure the safety and comfort drivers rely on. The automotive service technician makes use of various mechanical and electrical test instruments and gauges, including scan tools, oscilloscopes, pressure gauges, pneumatic tools and hand tools. The curriculum is planned to prepare the graduate to perform duties concerned with diagnosis, repair and maintenance of motor vehicles. Graduates of this program will be prepared for entry-level employment in the following areas:

- Dealership service technician
- Factory technical representative
- Independent service technician
- Service engineer
- Service writer

Students desiring to earn the automotive service technology program designation must complete the following general education and required core and specialized courses:

Note: The following codes identify courses that satisfy MCCC's General Education Requirements:
(C1) GE Natural Sciences Competency
(C2) GE Mathematics Competency
(C3) GE Writing Competency
(C4) GE Computer Literacy Competency
(C5) GE Human Experience Competency
(C6) GE Social Systems Competency

		Credits
Required General Education Courses		**21**
C1	PHY 101 (Technical Physics) or PHY 151 (General Physics I) or CHEM 150 (Fundamental Principles of Chemistry) or CHEM 151 (General College Chemistry I)	4
C2	MATH 124 (Technical Mathematics II) or competency	4
C3	ENGL 151 (English Composition I)	3
C4	MDTC 160* (Mechanical Drafting and CAD I)	4
C5	Expressions of the Human Experience Competency	3
C6	Social Systems Competency	3

** MDTC 160 (Mechanical Drafting and CAD I) can be replaced by CIS 130 (Introduction to Computer Information Systems).*
See the General Education Requirements on page 33 or the college website (www.monroeccc.edu) for a list of courses that satisfy the General Education Learning Competencies.

	Credits
Required Core Courses	**37**
1st Semester	
AST 101 (Introduction to Automotive Service)	3
AST 102 (Electrical Systems I)	4
AST 105 (Engine Theory)	3
2nd Semester	
AST 103 (Electrical Systems II)	4
AST 120 (Brake Systems)	4
AST 125 (Steering and Suspension)	4
Summer Semester	
AST 130 (Heating and Air Conditioning)	4
3rd Semester	
AST 202 (Engine Performance I)	4
Restricted Elective Option**	
4th Semester	
AST 203 (Engine Performance II)	4
Restricted Elective Option**	
AST 249 (Work Experience)	3
Restricted Electives (choose 1)**	**5**
AST 205 (Engine Repair)	5
AST 210 (Manual Transmission and Driveline Repair)	5
AST 211 (Automatic Transmission Repair)	5
Total Degree Requirements	**63 credits**
Total Degree Cost	**87 minimum billable contact hours**

*** Designates elective course (choose only one option 3rd or 4th semester). AST 210 (Manual Transmission and Driveline Repair) or AST 211 (Automatic Transmission Repair) to be offered alternatively in Fall semester of each year. AST 205 (Engine Repair) to be offered in the Winter semester.*

Certificate Program: Automotive Service Technology

In addition to the two-year associate degree program, Monroe County Community College offers a certificate program in automotive service technology. The basic core subjects of automotive repair are covered in these courses. Skill development and job procurement are the primary objectives of this program, and all courses taken in this certificate program are applicable toward the associate of applied science degree.

Required Core Courses	**Credits**
AST 101 (Introduction to Automotive Service)	3
AST 102 (Electrical Systems I)	4
AST 120 (Brake Systems)	4
AST 103 (Electrical Systems II)	4
AST 125 (Steering and Suspension)	4
AST 130 (Heating and Air Conditioning)	4
Total Certificate Requirements	**23 credits**
Total Certificate Cost	**37 minimum billable contact hours**