

AUTOMOTIVE TECHNOLOGY

AUTOMOTIVE TECHNOLOGY A.A.S.

Program Code: E.AUT.AAS

Associate in Applied Science (A.A.S.)

Graduation requirement — 71–73 semester hours

The Automotive Technology Program prepares graduates for entry-level employment in the automotive industry. The Automotive Technician Program is designed to give graduates skill to succeed in new car dealerships and independent service centers. This program is designed to develop strong technical skills along with managerial skills.

Curriculum for the Automotive Technology degree is based on the Master Automotive Service Technology standards (MAST) set by the Automotive Service Excellence (ASE) Education Foundation.

Students should plan their programs with a faculty advisor.

NOTE: Students considering transferring to a senior institution will need to contact the institution as soon as possible to determine the general education courses that are transferable and the required credit hours.

Program Notes*

- AFD elective courses are offered each semester and may be completed during other semesters than the suggested sequence.
- A valid driver's license is required for internship courses.
- MAT 124 or MAT 107 or MAT 108 may be taken instead of MAT 131.
- General Education electives are chosen from two of the following categories: communications, social/behavioral sciences, humanities/fine arts, mathematics, physical/life sciences. For more information, see General Education requirements on p. 63.
- WLX substitutions are accepted for WLD 111, WLD 112, and WLD 212.
 - WLD 111 = WLX 112 + WLX 113 + WLX 114 + WLX 115
 - WLD 112 = WLX 116 + WLX 117
 - WLD 212 = WLX 210 + WLX 211
- For the Motorsport concentration, one credit hour of AFD 212 may be substituted for AFD 273 if work experience does not meet AFD 273 placement requirements.
- ENG 102 has a prerequisite of ENG 101.

Required Program Courses (35 hours) Cr. Hrs.

AFD 112	Introduction to Power Trains	3
AFD 113	Automotive Chassis Systems Maintenance and Light Repair	7
AFD 115	Basic Chassis Electrical Systems	7
AFD 117	Basic Automotive Electronics and Computer Control Strategies	3
AFD 119	Chassis Electrical/Electronic Systems and Accessories	4
AFD 210	Automotive Work Experience Seminar	2
AFD 231	Fuel and Emissions Diagnosis	4
AFD 234	Vehicle High-Voltage Systems	2
AFD 295	Service Shop Operations	3

AUTOMOTIVE TECHNICIAN CONCENTRATION

Program Code: E.AUT.AAS.TECH

The Automotive Technician Program prepares graduates for entry-level employment in automotive dealerships and independent service centers in technical positions. The program is designed to develop strong technical skills along with managerial skills.

Required Concentration Courses (18 hours)

AFD 110	Automotive Maintenance and Light Repair	4
AFD 111	Automotive Powertrain Maintenance and Light Repair	7
AFD 211	Auto Work Experience I	1
AFD 212	Auto Work Experience II	1
AFD 232	Multi-Cylinder Engine Overhaul	5

Electives (3–5 hours)

Choose from the following courses:

WLD 111	Introduction to Welding	4
AFD 233	Automatic Transmissions	3
AFD 217	Basic Refrigeration	3
AFD 296	Motorsport Vehicle System Assessment	3
AFD 298	Motorsport Chassis Analysis	5
AFD 297	Motorsport Concepts and Vehicle Preparation	4

Required General Education Courses (15 hours) Cr. Hrs.

ENG 101	Composition I	
or ENG 111	Workplace Writing	3
COM 103	Introduction to Public Speaking	
or COM 120	Interpersonal Communication	
or ENG 102	Composition II	3
MAT 131*	Applied Mathematics	3
General Education electives*		6

Total Semester Credit Hours

71–73

Suggested Full-time Sequence

FALL	SPRING	SUMMER
1st Semester	2nd Semester	3rd Semester
AFD 110	AFD 111	AFD 211
AFD 113	AFD 115	AFD elective
AFD 210	ENG 101	
MAT 131	or ENG 111	
FALL	SPRING	
4th Semester	5th Semester	
AFD 112	AFD 119	
AFD 117	AFD 212	
AFD 232	AFD 231	
COM 103 or COM 120	AFD 234	
or ENG 102	AFD 295	
Gen Ed elec	Gen Ed elec	

AUTOMOTIVE TECHNOLOGY (CONT'D)

AUTOMOTIVE MANAGEMENT CONCENTRATION

Program Code: E.AUT.AAS.MGNT

The Automotive Management Program prepares graduates for entry-level positions in the automotive industry in a variety of environments, including technical, business and managerial areas. Graduates may work in new car dealerships, independent repair shops, or retail automotive businesses.

Required Concentration Courses (13 hours)

AFD 110	Automotive Maintenance and Light Repair	4
AFD 111	Automotive Powertrain Maintenance and Light Repair	7
AFD 211	Auto Work Experience I	1
AFD 212	Auto Work Experience II	1

Electives (9 hours)

Choose from Accounting, Business, Marketing, or Management courses

9

Required General Education Courses (15 hours)

	Cr. Hrs.
ENG 101 Composition I or ENG 111 Workplace Writing	3
COM 103 Introduction to Public Speaking or COM 120 Interpersonal Communication or ENG 102* Composition II	3
MAT 131* Applied Mathematics	3
General Education electives*	6

Total Semester Credit Hours 72

Suggested Full-time Sequence

FALL	SPRING	SUMMER
1st Semester	2nd Semester	3rd Semester
AFD 110	AFD 111	AFD 211
AFD 113	AFD 115	Gen Ed elec
AFD 210	ENG 101 or	
MAT 131	ENG 111	

FALL	SPRING
4th Semester	5th Semester
AFD 112	AFD 119
AFD 117	AFD 231
AFD 212	AFD 234
COM 103 or	AFD 295
COM 120 or	BUS elec
ENG 102	BUS elec
	Gen Ed elec

AUTOMOTIVE MOTORSPORT CONCENTRATION

Program Code: E.AUT.AAS.MOSP

The Automotive Motorsport Program prepares graduates to qualify for entry level motorsport industry assembly, fabrication, and team member positions. The program is designed to build on a strong foundation of traditional automotive course work while offering innovative motorsport courses and hands-on opportunities.

Required Concentration Courses (19 hours)

AFD 232	Multi-Cylinder Engine Overhaul	5
AFD 272	Motorsport Work Experience I	1
AFD 273	Motorsport Work Experience II	1
AFD 296	Motorsport Vehicle System Assessment	3
AFD 297	Motorsport Concepts and Vehicle Preparation	4
AFD 298	Motorsport Chassis Analysis	5

Electives (2-4 hours)

Choose from the following electives:

MFT 130	Basic Machine Processes	3
WLD 110	Beginning Gas and Arc Welding	2
WLD 111	Introduction to Welding	4
WLD 112	Gas Metal Arc Welding	2
WLD 113	Gas Tungsten Arc Welding	2
WLD 212	Advanced Gas Metal Arc Welding	2
WLD 213	Advanced Gas Tungsten Arc Welding	2

Required General Education Courses* (15 hours)

	Cr. Hrs.
ENG 101 Composition I or ENG 111 Workplace Writing	3
COM 103 Introduction to Public Speaking or COM 120 Interpersonal Communication or ENG 102* Composition II	3
MAT 131* Applied Mathematics	3
General Education electives*	6

Total Semester Credit Hours 71-73

Suggested Full-time Sequence

FALL	SPRING	SUMMER
1st Semester	2nd Semester	3rd Semester
AFD 113	AFD 115	AFD 296
AFD 210	AFD 298	Gen Ed elec
AFD 297	ENG 101 or	
MAT 131	ENG 111	
	WLD elec	

FALL	SPRING
4th Semester	5th Semester
AFD 112	AFD 119
AFD 117	AFD 231
AFD 232	AFD 234
COM 103 or	AFD 272
COM 120 or	AFD 273
ENG 102	AFD 295
	Gen Ed elec