

AUTOMOTIVE TECHNOLOGY (ASE)

(Wallace Campus)

Advancements in technology have greatly affected today's automotive technician. Being a good mechanic is not enough. Today a technician must possess excellent mechanical skills, be knowledgeable of electronics, be able to diagnose complex problems, and be committed to keeping pace with future advancements. More than 100,000 jobs are available to qualified applicants, but technical training and hands-on experience are required.

Students are trained on late-model vehicles with modern equipment used in a classroom and laboratory setting. Students must purchase their own books, supplies, and tools as required on the tool list.

Students completing all courses listed in the curriculum will be awarded an associate in applied science degree in Automotive Technology. Students completing all Automotive Technology courses, CIS 146, ENG 101, MTH 116, and SPH 106 or 107 will be awarded a program certificate. Admission is conditional and depends on the student's ability to perform the essential functions identified for this program. Reasonable accommodations are considered.

DEGREE CURRICULUM

<i>Course</i>	<i>Credit Hours</i>
Area I: Written and Oral Communications	6
ENG 101 English Composition I	3
SPH 106 Fundamentals of Oral Communication OR	
SPH 107 Fundamentals of Public Speaking	3
Area II: Humanities and Fine Arts	3
Humanities/Fine Arts Elective	3
Area III: Natural Sciences, Mathematics, and Computer Science	9
CIS 146 Microcomputer Applications	3
MTH 116 Mathematical Applications	3
Science/Computer Science/Math Elective	3
Area IV: History, Social and Behavioral Sciences	3
History/Social/Behavioral Sciences Elective	3
Area V: Career and Technical Courses	52-54
Required Orientation Courses	
ORI 101 Orientation to College OR	
ORI 105 Orientation and Student Success	1-3
ORI 104 WorkKeys® Assessment and Advisement	1
Required Field of Concentration Courses	
ASE 101 Fundamentals of Automotive Technology	3
ASE 112 Electrical Fundamentals	3
ASE 121 Braking Systems	3
ASE 122 Steering and Suspension	3
ASE 124 Automotive Engines	3
ASE 130 Drive Train and Axles	3
ASE 133 Motor Vehicle Air Conditioning	3
ASE 162 Electrical and Electronic Systems	3
ASE 191 Co-op	2
ASE 212 Advanced Electrical and Electronic Systems	3
ASE 224 Manual Transmission/Transaxle	3
ASE 230 Automatic Transmission/Transaxle	3
ASE 239 Engine Performance	3

ASE 244 Engine Performance and Diagnostics	3
ASE 246 Automotive Emissions	3
ASE 291 Co-op	3
WKO 106 Workplace Skills	3
Total Field of Concentration Credits	50
Total Credits for Degree	73-75

CERTIFICATE CURRICULUM

<i>Course</i>	<i>Credit Hours</i>
Area I: Written and Oral Communications	6
ENG 101 English Composition I	3
SPH 106 Fundamentals of Oral Communication OR	
SPH 107 Fundamentals of Public Speaking	3
Area III: Natural Sciences, Mathematics, and Computer Science	6
CIS 146 Microcomputer Applications	3
MTH 116 Mathematical Applications	3
Area V: Career and Technical Courses	49
Required Orientation Courses	
ORI 101 Orientation to College	1
ORI 104 WorkKeys® Assessment and Advisement	1
Required Field of Concentration Courses	
ASE 101 Fundamentals of Automotive Technology	3
ASE 112 Electrical Fundamentals	3
ASE 121 Braking Systems	3
ASE 122 Steering and Suspension	3
ASE 124 Automotive Engines	3
ASE 130 Drive Train and Axles	3
ASE 133 Motor Vehicle Air Conditioning	3
ASE 162 Electrical and Electronic Systems	3
ASE 212 Advanced Electrical and Electronic Systems	3
ASE 224 Manual Transmission/Transaxle	3
ASE 230 Automatic Transmission/Transaxle	3
ASE 239 Engine Performance	3
ASE 244 Engine Performance and Diagnostics	3
ASE 246 Automotive Emissions	3
ASE 291 Co-op	3
Total Field of Concentration Credits	45
Total Credits for Degree	59

Automotive Technology Associate in Applied Science Degree Suggested Course Sequence

<i>FIRST SEMESTER</i>	<i>SECOND SEMESTER</i>	<i>THIRD SEMESTER</i>
<i>ASE 101</i>	<i>ASE 121</i>	<i>ASE 124</i>
<i>ASE 112</i>	<i>ASE 122</i>	<i>ASE 212</i>
<i>ASE 130</i>	<i>ASE 162</i>	<i>ASE 224</i>
<i>ASE 133</i>	<i>ASE 239</i>	<i>ASE 244</i>
<i>ORI 101 or 105</i>		
<i>FOURTH SEMESTER</i>	<i>FIFTH SEMESTER</i>	<i>SIXTH SEMESTER</i>
<i>ASE 191</i>	<i>ECO 231</i>	<i>ASE 230</i>
<i>CIS 146</i>	<i>Science/Computer</i>	<i>ASE 246</i>
<i>ENG 101</i>	<i>Science/Math Elective</i>	<i>ASE 291</i>
<i>MTH 116</i>	<i>SPH 106</i>	<i>ORI 104</i>
	<i>Humanities/Fine Arts Elective</i>	<i>WKO 106</i>

**Automotive Technology
Certificate
Suggested Course Sequence**

FIRST SEMESTER	SECOND SEMESTER	THIRD SEMESTER
ASE 101	ASE 121	ASE 124
ASE 112	ASE 122	ASE 212
ASE 130	ASE 162	ASE 224
ASE 133	ASE 239	ASE 244
ORI 101		
FOURTH SEMESTER		
ASE 191	SPH 106 or 107	
CIS 146	ASE 230	
ENG 101	ASE 246	
MTH 116	ASE 291	
	ORI 104	

**BASIC AUTOMOTIVE/TRUCKING SERVICING & REPAIR
(Wallace Campus)**

This short certificate (STC) program of study that provides students with skills, knowledge, and hands-on experience in the heavy equipment and truck service, maintenance and repair industry. Today a technician must possess excellent critical thinking skills, computer skills, mechanical skills, working knowledge of electronics and be able to diagnose complex problems, and be committed to keeping pace with future advancements. Successful completion of the program prepares graduates for employment as a service/ maintenance technician, parts manager, or sales and service representative in the field of heavy equipment and truck service and repair.

SHORT CERTIFICATE CURRICULUM

Course	Credit Hours
Area V: Career and Technical Courses	29
Required Field of Concentration Courses	
ASE 101	Fundamentals of Automotive Technology 3
ASE 112	Electrical Fundamentals 3
ASE 121	Braking Systems 3
ASE 122	Steering and Suspension 3
ASE 124	Automotive Engines 3
ASE 130	Drive Train and Axles 3
ASE 133	Motor Vehicle Air Conditioning 3
ASE 191	Co-Op 2
ASE 291	Co-Op 3
WKO 106	Workplace Skills 3
	Total Credits for Short Certificate 29

**Basic Automotive/Trucking Servicing & Repair
(Wallace Campus)
Suggested Course Sequence**

FIRST SEMESTER	SECOND SEMESTER
ASE 101	ASE 121
ASE 112	ASE 122
ASE 124	ASE 191
ASE 130	ASE 291
ASE 133	WKO 106

**AGRICULTURAL TECHNOLOGY/EQUIPMENT SERVICING & REPAIR
(Wallace Campus)**

This short certificate (STC) program of study provides students with skills, knowledge, and hands-on experience in the agricultural technology/equipment service, maintenance and repair industry. Today a technician must possess excellent critical thinking skills, computer skills, mechanical skills, a working knowledge of electronics and hydraulics, be able to diagnose and solve complex problems, and be committed to keeping pace with future advancements. Successful completion of the program prepares graduates for entry level employment as a service/maintenance technician, parts manager, or sales and service representative in the field of agricultural equipment service and repair.

SHORT CERTIFICATE CURRICULUM

Courses	Credit Hours
Area V: Career and Technical Courses	29
Required Field of Concentration Courses	
ASE 101	Fundamentals of Automotive Technology 3
ASE 112	Electrical Fundamentals 3
ASE 124	Automotive Engines 3
ASE 130	Drive Train and Axles 3
ASE 133	Motor Vehicle Air Conditioning 3
INT 118	Fundamentals of Industrial Hydraulics and Pneumatics 3
ASE 239	Engine Performance 3
ASE 191	Co-Op 2
ASE 291	Co-Op 3
WKO 106	Workplace Skills 3
	Total Credits for Short Certificate 29

**Agricultural Technology/Equipment Servicing & Repair
(Wallace Campus)
Suggested Course Sequence**

FIRST SEMESTER	SECOND SEMESTER
ASE 101	INT 118
ASE 112	ASE 231
ASE 124	ASE 191
ASE 130	ASE 291
ASE 133	WKO 106