AUTOMOTIVE TECHNOLOGY (ASE)

(Wallace Campus)

Course

Area I:

ENG 101

SPH 106

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

Cours	e	Credit	Hours
Area 1	I:	Written and Oral Communications	6
ENG	101	English Composition I	3
SPH		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
	. 7		50.54
Area	. •	Career and Technical Courses	52-54
-	rea Oi	rientation Courses	
	1 0 1	O : 4 4: 4 C 11 OD	
ORI	101	Orientation to College OR	1.2
ORI	105	Orientation and Student Success	1-3
ORI ORI	105 104	Orientation and Student Success WorkKeys® Assessment and Advisement	1-3 1
ORI ORI <i>Requi</i>	105 104 <i>red Fi</i>	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses	1
ORI ORI Requi ASE	105 104 red Fi 101	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology	1
ORI ORI Requi ASE ASE	105 104 <i>red Fi</i> 101 112	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals	3 3
ORI ORI Requi ASE ASE ASE	105 104 <i>red Fi</i> 101 112 121	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems	3 3 3
ORI ORI Requi ASE ASE ASE ASE	105 104 <i>red Fi</i> 101 112 121 122	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension	3 3 3 3
ORI ORI Requi ASE ASE ASE ASE ASE	105 104 Fred Fi 101 112 121 122 124	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines	3 3 3 3 3
ORI ORI Requi ASE ASE ASE ASE ASE ASE	105 104 <i>red Fi</i> 101 112 121 122 124 130	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles	3 3 3 3 3 3 3
ORI ORI Requi ASE ASE ASE ASE ASE ASE	105 104 <i>ired Fi</i> 101 112 121 122 124 130 133	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning	3 3 3 3 3 3 3 3
ORI ORI Requi ASE	105 104 red Fi 101 112 121 122 124 130 133 162	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning Electrical and Electronic Systems	3 3 3 3 3 3 3 3 3
ORI ORI Requi ASE	105 104 red Fi 101 112 121 122 124 130 133 162 191	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning Electrical and Electronic Systems Co-op	3 3 3 3 3 3 3 3 3 3 2
ORI ORI Requi ASE	105 104 red Fi 101 112 121 122 124 130 133 162 191 212	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning Electrical and Electronic Systems Co-op Advanced Electrical and Electronic Systems	3 3 3 3 3 3 3 3 3 3 2 3
ORI ORI Requi ASE	105 104 <i>ired Fi</i> 101 112 121 122 124 130 133 162 191 212 224	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning Electrical and Electronic Systems Co-op Advanced Electrical and Electronic Systems Manual Transmission/Transaxle	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ORI ORI Requi ASE	105 104 ired Fi 101 112 121 122 124 130 133 162 191 212 224 230	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning Electrical and Electronic Systems Co-op Advanced Electrical and Electronic Systems Manual Transmission/Transaxle Automatic Transmission/Transaxle	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ORI ORI Requi ASE	105 104 <i>ired Fi</i> 101 112 121 122 124 130 133 162 191 212 224	Orientation and Student Success WorkKeys® Assessment and Advisement eld of Concentration Courses Fundamentals of Automotive Technology Electrical Fundamentals Braking Systems Steering and Suspension Automotive Engines Drive Train and Axles Motor Vehicle Air Conditioning Electrical and Electronic Systems Co-op Advanced Electrical and Electronic Systems Manual Transmission/Transaxle	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

	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

Written and Oral Communications

Fundamentals of Oral Communication OR

English Composition I

Credit Hours

6

3

CERTIFICATE CURRICULUM

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
	X 7		40
Area		Career and Technical Courses	49
		rientation Courses	
	101	ε	1
ORI		WorkKeys® Assessment and Advisement	1
_		ield of Concentration Courses	
ASE		Fundamentals of Automotive Technology	3
		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 3 3 3 3 3 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

ASE 121	ASE 124
ASE 122	ASE 212
ASE 162	ASE 224
ASE 239	ASE 244
FIFTH SEMESTER	SIXTH SEMESTER
ECO 231	ASE 230
Science/Computer	ASE 246
Science/Math Elective	ASE 291
SPH 106	ORI 104
Humanities/Fine Arts	WKO 106
Elective	
	ASE 122 ASE 162 ASE 239 FIFTH SEMESTER ECO 231 Science/Computer Science/Math Elective SPH 106 Humanities/Fine Arts

Automotive Technolog Certificate Iggested Course Seque	
SECOND SEMESTER	THIRD SEMESTER
ASE 121	ASE 124
ASE 122	ASE 212
ASE 162	ASE 224
ASE 239	ASE 244
FIFTH SEMESTER	
SPH 106 or 107	
ASE 230	
ASE 246	
ASE 291	
ORI 104	
	Certificate aggested Course Sequent SECOND SEMESTER ASE 121 ASE 122 ASE 162 ASE 239 FIFTH SEMESTER SPH 106 or 107 ASE 230 ASE 246 ASE 291

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 CURRRICULUM

Course		Credit Ho	urs
Area V:		Career and Technical Courses	29
Required	l 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

FIRS	T SEMESTER	SECO	ND 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 CURRRICULUM

Cours	ses	Credit Ho	urs
Area	V: Career a	nd Technical Courses	29
Requi	ired 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				
		2200	ND SEMESTER	
ASE	101	INT	118	
ASE	112	ASE	231	
ASE	124	ASE	191	
ASE	130	ASE	291	
ASE	133	WKO	106	
	FIRST ASE ASE ASE ASE	FIRST SEMESTER ASE 101 ASE 112 ASE 124 ASE 130	FIRST SEMESTER SECO. ASE 101 INT ASE 112 ASE ASE 124 ASE ASE 130 ASE	