

PROGRAMS

AUTOMOTIVE SYSTEMS TECHNOLOGY

Curricula in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The programs provide an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The Automotive Systems Technology program prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. This program includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.

Associate (A60160)

Fall Semester 1

		Lec	Lab	Clinic	Credit
ACA-115	Success & Study Skills	0	2	0	1
English Options	English Options Listed Below	3	0	0	3
TRN-110	Introduction to Transport Technology	1	2	0	2
TRN-120	Basic Transportation Electricity	4	3	0	5
TRN-140	Transportation Climate Control	1	2	0	2
TRN-170	Pc Skills for Transportation	1	2	0	2
TRN-180	Basic Welding for Transportation	1	4	0	3
				Total:	18

Spring Semester 1

		Lec	Lab	Clinic	Credit
AUT-116	Engine Repair	2	3	0	3
AUT-116A	Engine Repair Lab	0	3	0	1
AUT-141	Suspension & Steering Systems	2	3	0	3
AUT-151	Brake Systems	2	3	0	3
AUT-181	Engine Performance 1	2	3	0	3
AUT-231	Manual Transmissions/Transaxles/Drive Trains	2	3	0	3
				Total:	16

Summer Semester 1

		Lec	Lab	Clinic	Credit
Communications	Communications Options Listed Below	3	0	0	3
Option					
Math Option	Mathematics Options Listed Below	2	2	0	3
				Total:	6

Fall Semester 2

		Lec	Lab	Clinic	Credit
AUT-163	Advanced Automotive Electricity	2	3	0	3
AUT-212	Auto Shop Management	3	0	0	3
AUT-221	Automatic Transmissions/Transaxles	2	3	0	3
AUT-281	Advanced Engine Performance	2	2	0	3
Humanities Option	Humanities and Fine Arts Options Listed Below	3	0	0	3
				Total:	15

Spring Semester 2

		Lec	Lab	Clinic	Credit
ELN-112	Diesel Electronics System	2	6	0	4
HET-110	Diesel Engines	3	9	0	6
HET-125	Preventive Maintenance	1	3	0	2
Social & Behavioral Option	Social & Behavioral Science Options Listed Below	3	0	0	3
				Total:	15

Total Credit Hours: 70**English: Choose One of the following courses:**

		Lec	Lab	Clinic	Credit
ENG-110	Freshman Composition	3	0	0	3
ENG-111	Writing and Inquiry	3	0	0	3

Mathematics: Choose at least 3 hours from the following courses:

		Lec	Lab	Clinic	Credit
MAT-110	Mathematical Measurement and Literacy	2	2	0	3
MAT-143	Quantitative Literacy	2	2	0	3

Humanities/Fine Arts Choices for AAS Degree Programs Unless Otherwise Noted:

		Lec	Lab	Clinic	Credit
ART-111	Art Appreciation	3	0	0	3
HUM-110	Technology and Society	3	0	0	3
HUM-115	Critical Thinking	3	0	0	3
MUS-110	Music Appreciation	3	0	0	3

Social and Behavioral Sciences Choices for AAS Degree Programs Unless Otherwise Noted:

		Lec	Lab	Clinic	Credit
ECO-251	Principles of Microeconomics	3	0	0	3
ECO-252	Principles of Macroeconomics	3	0	0	3
POL-120	American Government	3	0	0	3
PSY-150	General Psychology	3	0	0	3
SOC-210	Introduction to Sociology	3	0	0	3

Diploma (D60160)

Fall Semester 1

		Lec	Lab	Clinic	Credit
ACA-115	Success & Study Skills	0	2	0	1
English Options	English Options Listed Below	3	0	0	3
TRN-110	Introduction to Transport Technology	1	2	0	2
TRN-120	Basic Transportation Electricity	4	3	0	5
TRN-140	Transportation Climate Control	1	2	0	2
TRN-170	Pc Skills for Transportation	1	2	0	2
TRN-180	Basic Welding for Transportation	1	4	0	3
				Total:	18

Spring Semester 1

		Lec	Lab	Clinic	Credit
AUT-116	Engine Repair	2	3	0	3
AUT-116A	Engine Repair Lab	0	3	0	1
AUT-141	Suspension & Steering Systems	2	3	0	3
AUT-151	Brake Systems	2	3	0	3
AUT-181	Engine Performance 1	2	3	0	3
AUT-231	Manual Transmissions/Transaxles/Drive Trains	2	3	0	3
				Total:	16

Summer Semester 1

		Lec	Lab	Clinic	Credit
Math Option	Mathematics Options Listed Below	2	2	0	3
				Total:	3

Total Credit Hours: 37

English: Choose One of the following courses:

		Lec	Lab	Clinic	Credit
ENG-110	Freshman Composition	3	0	0	3
ENG-111	Writing and Inquiry	3	0	0	3

Mathematics: Choose at least 3 hours from the following courses:

		Lec	Lab	Clinic	Credit
MAT-110	Mathematical Measurement and Literacy	2	2	0	3
MAT-143	Quantitative Literacy	2	2	0	3

Certificates

Automotive Systems Technology-Basic Certificate (C60160B)

Fall Semester 1

		Lec	Lab	Clinic	Credit
TRN-110	Introduction to Transport Technology	1	2	0	2
TRN-120	Basic Transportation Electricity	4	3	0	5
TRN-140	Transportation Climate Control	1	2	0	2
TRN-170	Pc Skills for Transportation	1	2	0	2

Fall Semester 1

TRN-180 Basic Welding for Transportation

Lec	Lab	Clinic	Credit
1	4	0	3
Total:			14

Total Credit Hours: 14**Automotive Systems Technology-Diesel Certificate (C60160D)****Spring Semester 2**ELN-112 Diesel Electronics System
HET-110 Diesel Engines
HET-125 Preventive Maintenance

Lec	Lab	Clinic	Credit
2	6	0	4
3	9	0	6
1	3	0	2
Total:			12

Total Credit Hours: 12

