

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 in Applied Science Degree (AAS) Automotive Systems Technology (A60160)

Fall Semester 1		Lec	Lab	Clinic	Credit
ACA-115	Success and Study Skills	0	2	0	1
ENG 110	Freshman Composition	3	0	0	3
or ENG-111	Writing and Inquiry	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 and Steering Systems	2	3	0	3
AUT-151	Brake Systems	2	3	0	3
AUT-181	Engine Performance I	2	3	0	3
AUT-231	Manual Transmissions/Axles/Drive Train	2	3	0	3
Total:					16
Summer Semester 1		Lec	Lab	Clinic	Credit
COM-120	Intro to Interpersonal Communication	3	0	0	3
or COM-231	Public Speaking	3	0	0	3
or ENG-112	Writing/Research in Disciplines	3	0	0	3
	Mathematics	3	0	0	3
Total:					6

Fall Semester 2		Lec	Lab	Clinic	Credit
AUT-163	Adv Auto 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/Fine Arts	3	0	0	3
					Total: 15

Spring Semester 2		Lec	Lab	Clinic	Credit
ELN-112	Diesel Electronic System	2	6	0	4
HET-110	Diesel Engines	3	9	0	6
HET-125	Preventative Maintenance	1	3	0	2
	Social and Behavioral Sciences	3	0	0	3
					Total: 15

Total Credit Hours: 70

Mathematics: Choose at least 3 hours from the following courses:		Lec	Lab	Clinic	Credit
MAT-110	Math Measurement and Literacy	2	2	0	3
MAT-143	Quantitative Literacy	2	2	0	3

Automotive Systems Technology Diploma (D60160)

Fall Semester 1		Lec	Lab	Clinic	Credit
ACA-115	Success and Study Skills	0	2	0	1
ENG 110	Freshman Composition	3	0	0	3
or ENG-111	Writing and Inquiry	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-116	Engine Repair Lab	0	3	0	1
AUT-141	Suspension and Steering Systems	2	3	0	3
AUT-151	Brake Systems	2	3	0	3
AUT-181	Engine Performance I	2	3	0	3
AUT-231	Manual Transmissions/Axles/Drive Train	2	3	0	3
					Total: 16

Summer Semester 1

	Lec	Lab	Clinic	Credit
Mathematics	3	0	0	3
				Total: 3

Total Credit Hours: 37**Automotive Systems Technology-Basic Certificate (C60160B)****Spring 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
TRN-180 Basic Welding for Transportation	1	4	0	3
				Total: 14

Total Credit Hours: 14**Automotive Systems Technology-Diesel Certificate (C60160D)****Spring Semester 2**

	Lec	Lab	Clinic	Credit
ELN-112 Diesel Electronic System	2	6	0	4
HET-110 Diesel Engines	3	9	0	6
HET-125 Preventative Maintenance	1	3	0	2
TRN-180 Basic Welding for Transportation	1	4	0	3
				Total: 12

Total Credit Hours: 12