

## PROGRAMS

### AUTOMOTIVE SYSTEMS TECHNOLOGY (A60160)

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides 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.

**Automotive Systems Technology:** A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. 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 conditioning systems

Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time, entry-level employment in dealerships and repair shops in the automotive service industry.

#### Associate in Applied Science Degree Program

		Course Hours Per Week		Semester Hours
First Semester (Fall)		Class	Lab	Credit
ACA-115	Success & Study Skills	0	2	1
AUT-141	Suspension & Steering Sys	2	3	3
AUT-141A	Suspension & Steering Lab	0	3	1
MAT***	MAT-110 or higher	2-3	2	3-4
TRN-110	Intro to Transport Tech	1	2	2
TRN-120	Basic Transp Electricity	4	3	5
<b>Credit Hours</b>		<b>9-10</b>	<b>15</b>	<b>15-16</b>
Second Semester (Spring)				
AUM-111	Managing Automotive Org	3	0	3
AUT-151	Brake Systems	2	3	3
AUT-151A	Brakes Systems Lab	0	3	1
AUT-163	Adv Auto Electricity	2	3	3
TRN-180	Basic Welding for Transp	1	4	3
<b>Credit Hours</b>		<b>8</b>	<b>13</b>	<b>13</b>

		Course Hours Per Week		Semester Hours
Third Semester (Summer)				
ENG-111	Writing and Inquiry	3	0	3
TRN-140	Transp Climate Control	1	2	2
TRN-140A	Transp Climate Cont Lab	1	2	2
Credit Hours		5	4	7
Fourth Semester (Fall)				
AUT-116	Engine Repair	2	3	3
AUT-116A	Engine Repair Lab	0	3	1
AUT-181	Engine Performance 1	2	3	3
AUT-183	Engine Performance 2	2	6	4
TRN-112	Powertrain Maint/Light Repair	2	6	4
Credit Hours		8	21	15
Fifth Semester (Spring)				
AUT-113	Automotive Servicing I	0	6	2
AUT-231	Man Trans/Axles/Drtrains	2	3	3
COM-231 or COM-120	Public Speaking or Intro Interpersonal Com	3	0	3
PSY-118	Interpersonal Psychology	3	0	3
***	Restricted Elective	0-3	0-20	2-4
Credit Hours		8-11	9-29	13-15
Sixth Semester (Summer)				
AUT-221	Auto Transm/Transaxles	2	3	3
***	Humanities/Fine Arts Elective	3	0	3
Credit Hours		5	3	6
Total Required Minimum Semester Hours Credit				69

Restricted Electives:		Class	Lab	Credit
ACC-120	Prin of Financial Accounting	3	2	4
ACC-149	Intro to ACC Spreadsheets	1	3	2
BUS-137	Principles of Management	3	0	3
BUS-153	Human Resource Management	3	0	3
BUS-255	Org Behavior in Business	3	0	3
LDD-112	Intro Light-Duty Diesel	2	2	3
LDD-181	Ldd Fuel Systems	2	6	4
WBL-112S	Work-Based Learning I	0	20	2

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