

Automotive Servicing

Certificate in Applied Science

Credit Requirements: 39 Semester Credit Hours

Day

The Automotive Servicing program prepares students for employment in the automotive servicing industry. This program teaches the basic skills required for the diagnosis, maintenance and repair of passenger cars and light trucks, through theory and shop instruction.

Admission into this program requires a valid driver's license and qualifying scores on SAT, ACT or TTC's placement test. High school graduation is not required if you are at least 18 years old.

Recommended Sequence of Courses

First Semester – Fall

AUT 101	Engine Fundamentals	3
AUT 111	Brakes	3
AUT 131	Electrical Systems	3
AUT 133	Electrical Fundamentals	3
		Total 12

Second Semester – Spring

AUT 103	Engine Reconditioning	4
AUT 145	Engine Performance	3
AUT 149	Ignition and Fuel Systems	4
AUT 241	Automotive Air Conditioning	4
		Total 15

Third Semester – Summer

AUT 116	Manual Transmission and Axle	4
AUT 122	Suspension and Alignment	4
AUT 152	Automatic Transmission	4
		Total 12

Automotive Servicing

Certificate in Applied Science

Credit Requirements: 39 Semester Credit Hours

Evening

The Automotive Servicing program prepares students for employment in the automotive servicing industry. This program teaches the basic skills required for the diagnosis, maintenance and repair of passenger cars and light trucks, through theory and shop instruction.

Admission into this program requires a valid driver's license and qualifying scores on SAT, ACT or TTC's placement test. High school graduation is not required if you are at least 18 years old.

Recommended Sequence of Courses

First Semester – Fall

AUT 101	Engine Fundamentals	3
AUT 133	Electrical Fundamentals	3
		Total 6

Second Semester – Spring

AUT 122	Suspension and Alignment	4
AUT 131	Electrical Systems	3
		Total 7

Third Semester – Summer

AUT 111	Brakes	3
AUT 241	Automotive Air Conditioning	4
		Total 7

Fourth Semester – Fall

AUT 116	Manual Transmission and Axle	4
AUT 152	Automatic Transmission	4
		Total 8

Fifth Semester – Spring

AUT 145	Engine Performance	3
AUT 149	Ignition and Fuel Systems	4
		Total 7

Sixth Semester – Summer

AUT 103	Engine Reconditioning	4
		Total 4

Basic Construction Trades

Certificate in Applied Science

Credit Requirements: 27 Semester Credit Hours

Day

This certificate program teaches basic residential construction skills. A combination of credit courses is used to teach and build a house. The program prepares students for entry into the residential construction industry.

Admission into this program requires qualifying scores on SAT, ACT or TTC's placement test. High school graduation is not required if you are at least 18 years old.

Recommended Sequence of Courses

First Semester – Fall

BCT 102	Fundamentals of Building Construction	4
BCT 103	Construction Site Layout	4
BCT 105	Tool Usage and Safety	2
BCT 106	Beginning Woodworking	2
BCT 112	Construction Print Reading	2
		Total 14

Second Semester – Spring

BCT 138	Residential Wiring	5
BCT 151	Introduction to Residential Plumbing	3
BCT 203	Exterior and Interior Finishes	5
		Total 13

Basic Construction Trades

Certificate in Applied Science

Credit Requirements: 27 Semester Credit Hours
Evening

This certificate program teaches basic residential construction skills. A combination of credit courses is used to teach and build a house. The program prepares students for entry into the residential construction industry.

Admission into this program requires qualifying scores on SAT, ACT or TTC’s placement test. High school graduation is not required if you are at least 18 years old.

Recommended Sequence of Courses

First Semester – Fall

BCT 102	Fundamentals of Building Construction	4
BCT 103	Construction Site Layout	4
BCT 105	Tool Usage and Safety	2
BCT 112	Construction Print Reading	2
		Total 12

Second Semester – Spring

BCT 138	Residential Wiring	5
BCT 106	Beginning Woodworking	2
		Total 7

Third Semester – Summer

BCT 151	Introduction to Residential Plumbing	3
BCT 203	Exterior and Interior Finishes	5
		Total 8

Basic Industrial Work Skills

Certificate in Applied Science

Credit Requirements: 26 Semester Credit Hours

This certificate is designed to offer employability skills for the industrial environment and prepare the student for various entry-level positions at industrial and manufacturing work sites. Topics such as safety, communication, problem solving and computer use are introduced.

Admission into this program requires qualifying scores on SAT, ACT or TTC’s placement test. High school graduation is not required if you are at least 18 years old.

Recommended Sequence of Courses

First Semester – Summer

IMT 102	Industrial Safety	2
*CWE 114	Cooperative Work Experience	4
		Total 6

Second Semester – Fall

IMT 210	Basic Industrial Work Skills I	3
ENG 150	Basic Communications	3
		Total 6

Third Semester – Spring

IMT 163	Problem Solving for Mechanical Applications	3
IMT 211	Basic Industrial Work Skills II	3
		Total 6

Fourth Semester – Summer

QAT 110	Manufacturing Methods	3
CPT 101	Introduction to Computers	3
*CWE 122	Cooperative Work Experience	2
		Total 8

**Students may substitute the following for CWE 114 and CWE 122: a total of six credit hours from any of the following categories: IMT, WLD, ACR, MTT, EEM or QAT. Courses selected are subject to advisor approval.*

Basic Machining and CNC Fundamentals

Certificate in Applied Science

Credit Requirements: 30 Semester Credit Hours

Fall Semester/Evening Start

This program introduces students to workplace safety, blueprint reading, precision measuring, basic conventional machining and CNC operations including set-up and programming. Students are prepared for entry-level employment in the metal-working industry.

Admission into this program requires qualifying scores on SAT, ACT or the TTC placement test. High school graduation is not required if you are at least 18 years old.