

# Automotive Brakes and Alignment Specialist

**Certificate in Applied Science**

**Credit Requirements: 10 Semester Credit Hours**

The Automotive Brakes and Alignment Specialist program provides instruction in the theory, diagnosis and repair of automobile steering and braking systems. Graduates of this program should be able to service and repair the hydraulic, vacuum and mechanical components of automobile braking systems, and to diagnose, adjust and repair components of manual and power-assist steering systems. Graduates with the required work experience should be prepared for the ASE certification tests in Brakes and Suspension and Steering.

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 – Spring**

AUT 122	Suspension and Alignment	4
		<b>Total 4</b>

**Second Semester – Summer**

AUT 111	Brakes	3
AUT 211	Advanced Brakes	3
		<b>Total 6</b>

# Automotive Engine Performance Specialist

**Certificate in Applied Science**

**Credit Requirements: 11 Semester Credit Hours**

This certificate program provides instruction on the theory, diagnosis and repair of engine fuel, electrical and emission control systems. Graduates of this program should be able to evaluate, diagnose and repair carbureted and fuel-injected automobile fuel systems, conventional and electronic ignition systems, emission control systems, and on-board, computer-managed engine systems. Graduates with the required work experience should be prepared for the ASE certification test in Engine Performance.

Admission into this program requires a valid driver's license, qualifying scores on SAT, ACT or TTC's placement test, and successful completion

of AUT 133 or departmental approval. High school graduation is not required if you are at least 18 years old.

**Recommended Sequence of Courses**

**First Semester – Spring**

*AUT 145	Engine Performance	3
AUT 149	Ignition and Fuel Systems	4
		<b>Total 7</b>

**Second Semester – Summer**

*AUT 247	Electronic Fuel Systems	4
		<b>Total 4</b>

*\* AUT 149 Prerequisite*

# Automotive Engine Repair Specialist

**Certificate in Applied Science**

**Credit Requirements: 11 Semester Credit Hours**

The Automotive Engine Repair Specialist certificate program provides instruction on the theory, service and repair of automobile engines. Graduates of this program should be able to perform all phases of engine repair including diagnosis, disassembly, measurement, machining and reconditioning of components, reassembly and run-in of engines. Graduates with the required work experience should be prepared for the ASE certification test in Engine Repair.

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
		<b>Total 3</b>

**Second Semester – Summer**

AUT 103	Engine Reconditioning	4
		<b>Total 4</b>

**Third Semester – Fall**

AUT 263	Advanced Automotive Machining	4
		<b>Total 4</b>