



FIRST SEMESTER – FALL

Dept. No.	Hrs.	Gr.
First Half		
AST 172 Introduction to Automotive Services	2	___
AST 173 Braking Systems	4	___
Second Half		
AST 170 Engine Repair	4	___
AST 180A Basic Electrical Systems	2	___
	12	

SECOND SEMESTER – SPRING

Dept. No.	Hrs.	Gr.
First Half		
AST 171A Ignition Systems	4	___
AST 180B Starting and Charging Systems	2	___
Second Half		
AST 171B Fuel and Exhaust Systems	4	___
AST 180C Electrical Accessories	2	___
	12	

THIRD SEMESTER – FALL

Dept. No.	Hrs.	Gr.
First Half		
AST 200 Alternative Fuels	2	___
AST 280 Air Conditioning	4	___
Second Half		
AST 273 Automotive Computer Electronics	2	___
AST 281 Suspension and Steering	4	___
	12	

FOURTH SEMESTER – SPRING

Dept. No.	Hrs.	Gr.
First Half		
AST 270 Manual Drive Trains and Axles	4	___
AST 276 Emission Control Systems	2	___
Second Half		
AST 271 Automatic Transmissions/Transaxles	4	___
AST 279 ASE Testing	2	___
	12	
OPTIONAL		
Dept. No.	Hrs.	Gr.
ATI 200 Applied Technologies Internship ¹	1-3	___

¹ Although this class is recommended, it is not required for graduation from this program and therefore is ineligible for Title IV financial aid funding.

This is a Gainful Employment Certificate Program of 16 credit hours or more that prepares the student for gainful employment in a recognized occupation. For detailed information regarding program length, cost, average loan debt and completion details, select the following link to the Gainful Employment Worksheet for this program. [Gainful Employment Worksheet–Auto Services Technology Certificate Program \(00AST0052\)](http://www.jalc.edu/gainful_employment/auto_services_technology/Gedt.html). You can also access this information by typing the following URL into your browser’s address bar: http://www.jalc.edu/gainful_employment/auto_services_technology/Gedt.html

*John A. Logan College reserves the right to modify this curriculum guide as needed.
Please verify with your academic advisor the accuracy and time lines of this document.*

**Effective Date: Fall 2008
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All students registered for Automotive Services Technology classes will be required to furnish a basic tool set. The set includes the following:

Drive Sockets (1/4" sq.)

- (10) 6-pt Standard (5/32" through 1/2")
- (10) 6-pt. Metric (4, 5, 5.5, 6 through 12 mm)
- (1) Quick Release Ratchet
- (1) Extension

Drive Sockets (3/8" sq.)

- (9) 6-pt. or 12-pt. Standard (3/8" through 7/8")
- (10) 6-pt. or 12-pt. Metric (10mm through 19mm)
- (1) Ratchet
- (1) Extension (3"), (1) Extension (6")

Drive Sockets (1/2" sq.)

- (4) 6-pt. or 12-pt. Standard (15/16", 1", 1 1/16", 1 1/8")
- (4) 6-pt. or 12-pt. Metric (21mm, 22mm, 24mm, 27mm)
- (1) Ratchet
- (1) Extension (3")

Wrenches (combination)

- (7) Standard (3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4")
- (7) Metric (10mm, 12mm, 13mm, 14mm, 15mm, 17mm, 19mm)

Screwdrivers

- (2) Slotted (1 small, 1 large)
- (2) Phillips (1 small, 1 large)

Pliers

- (1) Slip Joint Pliers
- (1) Diagonal Cutting

Additional Tools

- (1) Hammer
- (1) Locking Tool Box

Additional Information: Principles of design and operation provide for an exact appreciation of the functions of automotive units. Coordinated laboratory work develops the ability to execute diagnostic tests and complete the repairs that are indicated. The curriculum prepares students for employment as line mechanics, diagnostic technicians, and industrial maintenance personnel, as well as shop managers, company technicians, factory representatives, or teachers.

Career Opportunities: Line mechanic, diagnostic technician, factory representative, factory technician, self-employment, automotive technician at dealerships, independent garages, automotive specialty shops, and parts-related businesses.