



Certificate in Automotive Services Technology

Career Curriculum 00AST0052
Minimum Hours: 49
Major Code: 1.2 470604J
Effective Date: Fall 2019

FIRST SEMESTER – FALL

Dept. No.	Hrs.	Grade
First Half		
ORI 100 College 101	1	_____
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	_____
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NOTES AND INFORMATION

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

SECOND SEMESTER – SPRING

Dept. No.	Hrs.	Grade
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	_____
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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

THIRD SEMESTER - FALL

Dept. No.	Hrs.	Grade
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	_____
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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.

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.

FOURTH SEMESTER – SPRING

Dept. No.	Hrs.	Grade
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	_____
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OPTIONAL

Dept. No.	Hrs.	Grade
INT 101 Internship ¹	1-3	