

Master Certificate in Automotive Services Technology

Career Curriculum 00AST 0052
Minimum Hours: 50
Major Code: 1.2 470604
Effective Date: Fall 2022

FIRST YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
AST	100	Automotive Orientation and Safety	2	_____
AST	101	Automotive Maintenance & Light Repair	3	_____
AST	183	Brakes Steering and Suspension I	3	_____
AST	180	Electrical I	3	_____
ORI	100	College 101	1	_____
			12	

FIRST YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
AST	170	Engine Repair	3	_____
AST	171	Engine Performance I	3	_____
AST	190	Electrical II	3	_____
AST	191	Automotive Service Lab I	4	_____
			13	

SECOND YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
AST	261	Engine Performance II	3	_____
AST	282	Automotive HVAC	3	_____
AST	283	Brakes, Steering and Suspension II	3	_____
AST	291	Automotive Service Lab II	4	_____
			13	

SECOND YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
AST	201	Hybrid/EV History and Safety	2	_____
AST	202	Hybrid/EV Diagnostic and Service	3	_____
AST	290	Drivetrain Basics	3	_____
AST	292	Automotive Service Lab III	4	_____
			12	

NOTES AND INFORMATION

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.

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