



AUTOMOTIVE SERVICES TECHNOLOGY
Master Certificate (Four Semesters – Block Scheduling)
Certificate Program

Career Curriculum 00AST0052 Certificate Program Minimum Hrs. 48 Major Code: 1.2 470604J
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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	___
	<u>12</u>	

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	___
	<u>12</u>	

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	___
	<u>12</u>	

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	___
	<u>12</u>	

OPTIONAL

Dept. No.	Hrs.	Gr.
ATI 200 Applied Technologies Internship	1-3	___

*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
rev. 05/2011

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.