



John A. Logan College

Associate in Applied Science Toward a Degree in Automotive Services Technology

Career Curriculum 00AST0004
Minimum Hours: 71
Major Code: 1.2 470604C
Effective Date: Fall 2019

FIRST SEMESTER – FALL

Dept. No.	Hrs.	Grade
General Education Courses		
ORI 100 College 101	1	_____
IND 138 Industrial Seminar	1	_____
MAT 113 or MAT 112 Introduction to Contemporary Mathematics OR MAT 100 Mathematics for Applied Technologies OR MAT 120 Elementary Statistics	3	_____
Automotive Courses		
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	_____
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SECOND SEMESTER – SPRING

Dept. No.	Hrs.	Grade
General Education Courses		
ENG 101 English Composition I ¹ OR ENG 113 Professional Technical Writing ¹	3	_____
PSY 110 College Success and Career Planning OR INT 101 Internship	3	_____
Automotive Courses		
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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THIRD SEMESTER – FALL

Dept. No.	Hrs.	Grade
General Education Courses		
CIS 101 Introduction to Computers	3	_____
COM 115 Speech OR COM 116 Interpersonal Communication	3	_____
Automotive Courses		
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	_____
	18	

FOURTH SEMESTER – SPRING

Dept. No.	Hrs.	Grade
General Education Courses		
IAI Physical/Life Science OR IAI Humanities/ Fine Arts Elective	3-5	_____
IAI Social and Behavioral Science Elective	3	_____
Automotive Courses		
First Half		
AST 270 Manual Drive Trans and Axles	4	_____
AST 276 Emission Control Systems	2	_____
Second Half		
AST 271 Automotive Transmissions/Transaxles	4	_____
AST 279 ASE Testing	2	_____
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NOTES AND INFORMATION

¹ Requires a grade of "C" or higher.

The minimum general education component for the Associate in Applied Science degree requires satisfactory completion of at least 15 semester credits of coursework distributed over the disciplines of Communications, Mathematics, Arts and Humanities, Physical and Life Sciences, and Social and Behavioral Sciences. The curriculum guide for each Associate in Applied Science degree program will spell out the course requirements or options available for satisfying the general education component. With appropriate justification and in consultation with your academic advisor, a request to substitute a course for one recommended in this guide may be granted with the appropriate approvals from the Department Chair, Dean for Instruction and Vice-President for Instruction. However, no substitutions are allowed in Groups I-III (General Education Component; GECC) of the curriculum guide (see the Associate in Applied Science general degree requirements worksheet in the John A. Logan College Catalog).

Students planning to transfer and pursue a baccalaureate degree should, when given a choice, enroll in the general education course that is IAI GECC approved and articulated with participating Illinois institutions.

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 time lines of this document.
