



John A. Logan College

Associate in Applied Science

Toward a Degree in Automotive Services Technology

Career Curriculum 00AST0004

Minimum Hours: 70

Major Code: 1.2 470604C

Effective Date: Spring 2017

FIRST YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
AST	170	Engine Repair	4	_____
AST	172	Introduction to Automotive Services	2	_____
AST	173	Braking Systems	4	_____
AST	180A	Basic Electrical Systems	2	_____
IND	138	Industrial Seminar	1	_____
MAT	113	Introduction to Contemporary Mathematics OR	3	_____
		MAT 100 Mathematics for Applied Technologies OR	16	_____
		MAT 120 Elementary Statistics		

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).

FIRST YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
AST	171A	Ignition Systems	4	_____
AST	171B	Fuel and Exhaust Systems	4	_____
AST	180B	Starting and Charging Systems	2	_____
AST	180C	Electrical Accessories	2	_____
ENG	101	English Composition ¹ OR	3	_____
		ENG 113 Professional Technical Writing ¹		
PSY	110	College Success and Career Planning OR	3	_____
		ATI 200 Applied Technologies Internship (Summer only)	18	_____

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)

SECOND YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
AST	200	Alternative Fuels	2	_____
AST	273	Automotive Computer Electronics	2	_____
AST	280	Air Conditioning	4	_____
AST	281	Suspension and Steering	4	_____
CIS	101	Introduction to Computers	3	_____
SPE	115	Speech OR	3	_____
		SPE 116 Interpersonal Communication	18	_____

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.

SECOND YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
AST	270	Manual Drive Trains and Axles	4	_____
AST	271	Automatic Transmissions/Transaxles	4	_____
AST	276	Emission Control Systems	2	_____
AST	279	ASE Testing	2	_____
		IAI Physical/Life Science or IAI Humanities/ Fine Arts Elective	3-5	_____
		IAI Social and Behavioral Science Elective	3	_____
			18-20	_____