### Basic Certificate in Automotive Services Technology

**Career Curriculum 00AST0054**  
Minimum Hours: 24  
Major Code: 1.2 470804  
Effective Date: Fall 2022

#### FIRST YEAR – FALL SEMESTER

<table>
<thead>
<tr>
<th>Dept. No.</th>
<th>Course Title</th>
<th>Hrs.</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>AST 100</td>
<td>Automotive Orientation and Safety</td>
<td>2</td>
<td>_____</td>
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<tr>
<td>AST 101</td>
<td>Automotive Maintenance &amp; Light Repair</td>
<td>3</td>
<td>_____</td>
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<tr>
<td>AST 183</td>
<td>Brakes, Steering and Suspension I</td>
<td>3</td>
<td>_____</td>
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<tr>
<td>AST 180</td>
<td>Electrical I</td>
<td>3</td>
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#### FIRST YEAR – SPRING SEMESTER

<table>
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<th>Dept. No.</th>
<th>Course Title</th>
<th>Hrs.</th>
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<tbody>
<tr>
<td>AST 170</td>
<td>Engine Repair</td>
<td>3</td>
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<tr>
<td>AST 171</td>
<td>Engineer Performance I</td>
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<td>AST 190</td>
<td>Electrical II</td>
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<td>AST 191</td>
<td>Automotive Service Lab I</td>
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#### NOTES AND INFORMATION

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-p. or 12-p. Standard (3/8" through 7/8")
  - (10) 6-p. or 12-p. Metric (10mm through 19mm)
  - (1) Ratchet
  - (1) Extension (3")
  - (1) Extension (6")

- **Drive Sockets (1/2" sq.)**
  - (4) 6-p. or 12-p. Standard (15/16", 1", 1 1/16", 1 1/8")
  - (4) 6-p. or 12-p. Metric (21mm, 22mm, 24mm, 27mm)
  - (1) Ratchet
  - (1) Extension (3")

- **Wrenches (combination)**
  - (7) Metric (10mm, 12mm, 13mm, 14mm, 15mm, 17mm, 19mm)

- **Screwdrivers**
  - (2) Slotted (1 small, 1 large)
  - (1) Slip Joint Pliers
  - (1) Hammer

- **Pliers**
  - (2) Phillips (1 small, 1 large)
  - (1) Diagonal Cutting
  - (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 entry level oil change technician, tire service stores, as well as independent or self-employment garages.

**Career Opportunities:** self-employment, oil change shops, tire stores, independent garages, and part-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.