

# Automotive Technology

## Degree Type

Associate in Applied Science

The constantly evolving automotive industry needs well-educated and motivated technicians capable of continued growth and lifelong learning skills as new advanced technologies find their way onto our roads. The Automotive Technology track at LRCC consist of a series of evening and Saturday courses that provide students a well-rounded education with an emphasis on the service, diagnosis, and repair of today's complex automobiles and their integrated systems. Graduates who successfully complete the two-year Automotive Technology Program will receive an Associate in Applied Science Degree in Automotive Technology. Attaining this degree will open doors to numerous opportunities for higher skills jobs, income, and continued personal and professional growth. The range of career options include automotive technician in an independent shop or a franchise shop; parts person; service advisor; service management, ownership, and possible pathways to teaching.

Evening and Saturday hours make this program a convenient option for those individuals already working in the field, who want to improve their understanding and skills, or have the desire to prepare for ASE Certification testing. The courses are a combination of classroom theory and invaluable hands-on lab experience. Master Certified Technicians teach classes with many years of experience solving the technical concerns related to engine performance, emissions, drive train, steering, suspension and braking systems, audio systems and HVAC.

## Technical Requirements

The Automotive Technology student must:

- have a high school degree or equivalent.
- interview with one of the automotive faculty.
- have command of the English language.
- have reading comprehension skills sufficient to read and comprehend service literature.
- have communication skills sufficient to prepare required reports.
- be able to understand and follow both written and oral instructions.
- be able to complete requirements for college level classes.
- have sufficient vision to distinguish colors, read gauges, scopes, diagnostic equipment and information from a computer screen (adaptive equipment acceptable).
- have sufficient hearing to distinguish various sounds and noises (adaptive equipment acceptable);
- be able to stand for extended periods of time and the physical strength to lift automotive parts and equipment.
- have sufficient dexterity to perform manual skills related to automotive service.
- be able to work in an automotive service facility environment.
- maintain a valid driver's license.
- be able to purchase the minimum required tools.

**Students who complete the program will:**

- be able to identify learning needs and construct activities to attain continuous growth through self-directed lifelong learning.
- be able to safely perform routine diagnostics, service and repair on today's modern cars and light trucks.
- be able to safely diagnose and repair the integrated systems used on today's advanced vehicles.

## First Year

### Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO120L	Introduction to Automotive Service	2	4	3
AUTO150L	Suspension and Steering	3	7	4
AUTO138L	Electrical/Electronics I	3	5	4
ENGL100L	English Composition	4	0	4
INDL100L	College Essentials	1	0	1
<b>Sub-Total Credits</b>		<b>13</b>	<b>16</b>	<b>16</b>

### Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO139L	Electrical/Electronics II	3	5	4
AUTO140L	Braking Systems	3	4	4
ENGL124L	Business Communications	3	0	3
	Mathematics Elective (3 credits)	3	0	3
<b>Sub-Total Credits</b>		<b>12</b>	<b>9</b>	<b>14</b>

### Summer Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO145L	HVAC Systems	3	7	4
AUTO137L	Engine Mechanical	3	5	4
	Social Science Elective	3	0	3
<b>Sub-Total Credits</b>		<b>9</b>	<b>12</b>	<b>11</b>

## Second Year

### Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO240L	Manual Drive Trains	3	4	4
AUTO245L	Engine Performance I	3	5	4
	Science Elective (3 credits)	3	0	3
	Liberal Arts Elective	3	0	3
<b>Sub-Total Credits</b>		<b>12</b>	<b>9</b>	<b>14</b>

### Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
AUTO246L	Engine Performance II	3	5	4
AUTO265L	Automatic Transmissions and Transaxles	3	6	4
AUTO270L	Advanced Technology Systems	3	0	4
	Humanities/Fine Arts/Foreign Language Elective	3	0	3
<b>Sub-Total Credits</b>		<b>12</b>	<b>11</b>	<b>15</b>
<b>Total Credits</b>				<b>70</b>