

# Automotive Technology

## Semester Course Outline • 2022 – 2023

18 Months (4 Semesters) • Revised: 2/28/22

Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 71



### First Year – Fall Semester Groups 1 and 2

Course Number	Course Title	Clock Hours	Credits
AT 100	Safety	14	.5

#### Group 1

Course Number	Course Title	Clock Hours	Credits
AT 107	Introduction to Brake Systems	70	2.5
AT 108	Brake Systems Diagnostics	84	3
AT 119	Introduction to Steering, Suspension, and Drivetrain Systems	98	3.5
AT 122	Steering, Suspension, and Drivetrain Diagnostics	140	5
■ CSC 102	Windows Applications for Technicians	45	3
<b>Total</b>		437	17

#### Group 2

Course Number	Course Title	Clock Hours	Credits
AT 146	Introduction to Heating and Air Conditioning	56	2
AT 148	Heating and Air Conditioning Diagnostics	84	3
AT 155	Introduction to Electrical/Electronic Systems	98	3.5
AT 156	Electrical/Electronic Systems Diagnostics	168	6
■ CSC 102	Windows Applications for Technicians	45	3
<b>Total</b>		465	17.5

### First Year – Spring Semester

#### Group 1

Course Number	Course Title	Clock Hours	Credits
AT 146	Introduction to Heating and Air Conditioning	56	2
AT 148	Heating and Air Conditioning Diagnostics	84	3
AT 155	Introduction to Electrical/Electronic Systems	98	3.5
AT 156	Electrical/Electronic Systems Diagnostics	168	6
● MATH 100	Applied General Math	45	3
<b>Total</b>		465	17.5

Semester Course Outline • 2022 – 2023

Group 2

Course Number	Course Title	Clock Hours	Credits
AT 107	Introduction to Brake Systems	70	2.5
AT 108	Brake Systems Diagnostics	84	3
AT 119	Introduction to Steering, Suspension, and Drivetrain Systems	98	3.5
AT 122	Steering, Suspension, and Drivetrain Diagnostics	140	5
• MATH 100	Applied General Math	45	3
<b>Total</b>		437	17

Second Year – Fall Semester

Group 1

Course Number	Course Title	Clock Hours	Credits
AT 201	Introduction to Manual Transmission/Transaxle	56	2
AT 208	Diagnosis of Manual Transmissions/Transaxle	56	2
AT 212	Introduction to Automatic Transmission/Transaxle	56	2
AT 217	Diagnosis of Automatic Transmissions/Transaxle	112	4
AT 221	Introduction to Engine Repair	56	2
AT 225	Engine Repair Diagnostics	84	3
• COMM 101	Communications and Career Strategies	45	3
<b>Total</b>		465	18

Group 2

Course Number	Course Title	Clock Hours	Credits
AT 259	Introduction to Engine Performance	112	4
AT 263	Engine Performance Diagnostics	224	8
• ECON 105	Leadership in the Global Workplace	45	3
• PSYC 100	Psychology of Human Relations	45	3
<b>Total</b>		426	18

Semester Course Outline • 2022 – 2023

Second Year – Spring Semester

Group 1

Course Number	Course Title	Clock Hours	Credits
AT 259	Introduction to Engine Performance	112	4
AT 263	Engine Performance Diagnostics	224	8
● ECON 105	Leadership in the Global Workplace	45	3
● PSYC 100	Psychology of Human Relations	45	3
<b>Total</b>		426	18

Group 2

Course Number	Course Title	Clock Hours	Credits
AT 201	Introduction to Manual Transmission/Transaxle	56	2
AT 208	Diagnosis of Manual Transmissions/Transaxle	56	2
AT 212	Introduction to Automatic Transmission/Transaxle	56	2
AT 217	Diagnosis of Automatic Transmissions/Transaxle	112	4
AT 221	Introduction to Engine Repair	56	2
AT 225	Engine Repair Diagnostics	84	3
● COMM 101	Communications and Career Strategies	45	3
<b>Total</b>		465	18

**Elective Course:** With the instructor’s approval, SCT 100 – Solar Car Team may be substituted for up to 6 credits of course work or taken as an additional elective.

- Students who transfer in two credits in computer science will take CSC 101 – Computer Essentials for 1 credit.
- Students will select a course in each of the areas listed to meet general education requirements. Courses marked with an asterisk (\*) can be transferred directly to the university system and may be substituted for recommended courses on the outline. Students should speak with an advisor before doing so.

Students who select to take transferable communications course CMST 101 or ENGL 101, must also register for CSS 100 – Career Search Strategies for .5 credit. This curriculum is required for all Lake Area Tech graduates and is included in the COMM 101 course but is separate from the university system.

**Behavioral Science**

PSYC 101 – General Psychology \*

**Communications**

CMST 101 – Fundamentals of Speech \* (CSS 100 – Career Search Strategies .5 credit)  
 ENGL 101 – Composition \* (CSS 100 – Career Search Strategies .5 credit)

**Mathematics**

MATH 101 – Intermediate Algebra  
 MATH 114 – College Algebra \*

**Social Science**

ECON 201 – Principles of Microeconomics I \*  
 ECON 202 – Principles of Macroeconomics II \*  
 SOC 100 – Introduction to Sociology \*