Automotive Technology • Light Duty Diesel Option

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

LAKE AREA TECHNICAL COLLEGE

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
	Total	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
	Total	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
	Total	465	17.5

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
	Total	437	17

Semester Course Outline • 2022 – 2023

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
AT 202	Intro to Light Duty Drive Train/Transaxle	56	2
AT 204	Light Duty Drive Train/Transaxle Diagnostics	56	2
AT 220	Intro to Light Duty Automatic Transmissions/Transaxle	56	2
AT 222	Light Duty Automatic Transmissions/Transaxle Diagnostics	84	4
AT 226	Intro to Light Duty Engine Repair	56	2
AT 228	Light Duty Engine Repair Diagnostics	84	3
● COMM 101	Communications and Career Strategies	45	3
	Total	437	18

Second Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
AT 232	Intro to Light Duty Engine Performance	112	4
AT 234	Light Duty Engine Performance Diagnostics	224	8
● ECON 105	Leadership in the Global Workplace	45	3
● PSYC 100	Psychology of Human Relations	45	3
	Total	336	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 *