

Diesel Technology • Ag/Industrial Tractor Option • Truck Option

Semester Course Outline • 2023 – 2024

18 Months (4 Semesters) • Revised: 1/18/23

Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 69.5



Diesel Technology courses are taught in a sequential manner, therefore all first year course work must be completed before a student is eligible to enroll in their second year.

First Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
DT 107	Welding Technologies	28	1
DT 117	Shop Management	28	1
DT 137	Powertrains I	84	3
DT 144	Electrical Systems	84	3
DT 147	Hydraulics	84	3
DT 155	Preventive Maintenance and Inspection	84	3
HAZ 100	Hazardous Materials Safety	14	.5
● Selected Social Science Course (Choose one) ECON 105 – Leadership in the Global Workplace ECON 201 – Principles of Microeconomics I * ECON 202 – Principles of Macroeconomics II * SOC 100 – Introduction to Sociology *		45	3
Total		451	17.5

First Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
DT 126	Multi-cylinder Engine Overhaul	84	3
DT 149	Hydraulic Brakes	28	1
DT 152	Powertrains II	56	2
DT 165	Heating, Ventilation, and Air Conditioning (HVAC)	84	3
DT 179	Diesel Engines I A	42	1.5
DT 184	Diesel Engines I B	42	1.5
CSC 100	Computer Concepts	15	1
CSC 182	Technician Software	56	2
● Selected Mathematics Course (Choose one) MATH 100 – Applied General Math MATH 101 – Intermediate Algebra MATH 114 – College Algebra *		45	3
Total		452	18
Optional Courses Available (Offered in Spring Semester Only)			
CDL 100	CDL Written Preparation	15	1
CDL 105	CDL Vehicle Inspection	28	1
CDL 110	CDL Drivers Training	56	2

Semester Course Outline • 2023 – 2024

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
DT 210	Diesel Engines II	84	3
DT 237	Fuel Systems Tune-up and Troubleshooting	84	3
DT 238	Electrical Testing	84	3
DT 247	Emission Systems	84	3
<ul style="list-style-type: none"> Selected Behavioral Science Course (Choose one) PSYC 100 – Psychology of Human Relations PSYC 101 – General Psychology * 		45	3
Total		381	15

Second Year – Spring Semester Ag/Industrial Tractor Option

Course Number	Course Title	Clock Hours	Credits
DT 245	Hydraulic System Diagnostics	112	4
DT 246	Heating, Ventilation, and Air Conditioning (HVAC) Testing	28	1
DT 278	Combine Hydraulic and Electrical Familiarization	56	2
DT 282	Tractor Shop Production	168	6
DT 291	Tractor Electronic Controls/Global Positioning Systems and Auto Steer	84	3
<ul style="list-style-type: none"> Selected Communications Course (Choose one) CMST 101 – Fundamentals of Speech * (CSS 100 – Career Search Strategies .5 credit) COMM 101 – Communications and Career Strategies ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit) 		45	3
Total		493	19
Optional Courses Available (Offered in Spring Semester Only)			
CDL 100	CDL Written Preparation	15	1
CDL 105	CDL Vehicle Inspection	28	1
CDL 110	CDL Drivers Training	56	2

Semester Course Outline • 2023 – 2024

Second Year – Spring Semester – Truck Option

Course Number	Course Title	Clock Hours	Credits
DT 216	Truck Suspension and Steering	112	4
DT 217	Truck Brake Systems	112	4
DT 229	Engine Diagnostics and Repair	112	4
DT 231	Truck Drivetrains	70	2.5
DT 246	Heating, Ventilation, and Air Conditioning (HVAC) Testing	42	1.5
<ul style="list-style-type: none"> Selected Communications Course (Choose one) CMST 101 – Fundamentals of Speech * (CSS 100 – Career Search Strategies .5 credit) COMM 101 – Communications and Career Strategies ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit) 		45	3
Total		493	19
Optional Courses Available (Offered in Spring Semester Only)			
CDL 100	CDL Written Preparation	15	1
CDL 105	CDL Vehicle Inspection	28	1
CDL 110	CDL Drivers Training	56	2

Elective Courses 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.

CDL Testing and/or AED Testing – A student may transfer in up to 1 credit for CDL testing and/or AED testing. This will be approved by the Diesel Department Supervisor and the Lake Area Tech Registrar.

- 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.