

## **Tooele Technical College**

88 S Tooele Blvd, Tooele, UT 84074 435-248-1800

## **Certificate Syllabus Diesel Technician** Certificate 1 Year (Catalog Year: 2020) Tooele Tech Core (900 hours required) Diesel Technician (900 hours required) Hours 10.00 Computer Skills for Technicians (BTEC1903) Basic Computer Principles (1) 3.00 Word 2016 (2) 2.00 Excel 2016 (3) 2.00 PDF (4) 3.00 Workplace Relations (WKSK1501) 20.00 Attitude (1) 5.00 Time Management (2) 5.00 Communication (3) 5.00 Conflict Resolution/Relationship Building (4) 5.00 Safety and Shop Skills (HVDD1701) 5.00 Safety In The Work Place (1) 5.00 Tool Usage in the Diesel Profession (HVDD1902) 49.00 Basic Tools (1) 4.00 Reusable Type Fitting (2) 4.00 Measuring Instruments and Procedures (3) 14.00 Using a Pressure Washer (4) 2.00 Fasteners (5) 2.00 Using a Torque Wrench (6) 3.00 Using a Power Cut-Off Saw (7) 4.00 Using a Drill Press (8) 4.00 Using Shop Manual (9) 4.00 Making Gaskets (10) 1.00 Using a Tire Machine Automotive/Semi (11) 4.00 Proficiency Test (12) 3.00 Welding in the Diesel Profession (HVDD1703) 65.00 Welding Safety (1) 5.00 Oxy/Weld, Brazing & Cutting (2) 20.00 Arc Welding in 3 positions (3) 20.00 Mig Welding in 3 positions (4) 20.00 Math For The Automotive/Diesel Trades (HVDD1704) 60.00

Whole Numbers (1)

4.00

Decimals (2)	4.00
Fractions (3)	4.00
Geometry, Angle Measurement, and the Metric System (4)	4.00
Integers and Signed Numbers (5)	4.00
Ratios, Proportions, and Percentages (6)	4.00
Business and Statistics (7)	4.00
Completing Repair Orders (8)	4.00
Measurement Tools (9)	4.00
Automotive Engine (10)	4.00
Automotive Engine Systems (11)	4.00
Automobile Electrical Systems (12)	4.00
Automobile Drive Train (13)	4.00
Automobile Chassis (14)	4.00
Automobile HVAC (15)	4.00
Heavy Duty Brakes 1 (HVDD1905)	75.00
Inspection/Repair of Hydraulic Brakes (1)	30.00
Remove and Replace Front Wheels (2)	6.00
Remove and Replace Dual Wheels (3)	6.00
Pack Grease Style Wheel Bearings (4)	15.00
Adjust and Replace Oil Bath Bearings (5)	8.00
Operation/Air Brakes (6)	10.00
Heavy Duty Brakes 2 (HVDD1706)	45.00
Replace and Inspect Brakes/Hardware (1)	20.00
Repair/Replace Brake Chambers (2)	10.00
Electrical- ABS Brakes Inspection/Adjustment (3)	10.00
Brakes Proficiency (4)	5.00
Steering/Suspension 1 (HVDD1907)	47.00
Steering/Suspension Part Identification (1)	3.00
Replace King Pins – Straight Type (2)	8.00
Overhaul Steering Geer (3)	16.00
Replace Front Leaf Springs (4)	20.00
Steering/Suspension 2 (HVDD1708)	24.00
Check and Replace Tie Rods (1)	4.00
Semi-Truck Alignment (2)	14.00
Power Steering Pump/Gearbox Pressures (3)	4.00
Check/Adjust Electrical-ride Height Sensors (4)	2.00
Electrical/Electronic Systems 1 (HVDD1709)	62.00
Fundamentals of Atoms (1)	3.00
Electrical Components/Solder Wires (2)	4.00
Battery's/ Battery Charging (3)	4.00
Voltmeter Basics (4)	4.00
Electrical Circuits (5)	6.00
How to Read Wiring Diagrams (6)	6.00
Inspection/Repair of Alternators (7)	15.00

Inspection/Repair of Starter Motors (8)	14.00
Electrical Engine Adjustment/Testing (9)	6.00
Electrical/Electronic Systems 2 (HVDD1910)	73.00
Electrical Meters (1)	25.00
Operating Electrical Circuits (2)	25.00
Drop Voltage Testing (3)	8.00
Electrical Proficiency (4)	5.00
Basic Oscylliscope Testing (5)	10.00
Heavy Duty HVAC 1 (HVDD1711)	48.00
Theory of Operation (1)	4.00
HVAC Basic Components (2)	6.00
HVAC Compressor Controls (3)	6.00
HVAC Evaporator Controls (4)	6.00
A/C Test Preparation Procedures (5)	6.00
A/C Leak Test Procedures (6)	6.00
A/C Evacuating Recovery Procedures (7)	8.00
A/C Servicing Procedures (8)	6.00
Heavy Duty HVAC 2 (HVDD1712)	63.00
A/C Charging System (1)	10.00
A/C Component Repair (2)	21.00
A/C Electrical Circuits (3)	16.00
Retrofitting A/C Systems (4)	4.00
HVAC Proficiency Test (5)	12.00
Drive Train 1 (HVDD1713)	34.00
Drive Train Terminology (1)	3.00
Drive Line Inspection/Repair (2)	3.00
Clutch Inspection/Adjustment (3)	3.00
Small Transmissions Rebuild (4)	25.00
Drive Train 2 (HVDD1914)	63.00
Large Transmissions Rebuild/Replace (1)	38.00
Differentials Rebuild/Replace (2)	24.00
Transmission and Differential Proficiency (3)	1.00
Preventive Maintenance/Inspection 1 (HVDD1715)	34.00
Gasoline Engine Timing (1)	4.00
In Cab Inspection (2)	15.00
Circle Inspection/Fifth Wheel Inspection/Repair (3)	15.00
Preventive Maintenance/Inspection 2 (HVDD1716)	33.00
Tires and Wheel Inspection/Replacement (1)	5.00
Under Hood Inspection/Repair (2)	23.00
Under Vehicle Inspection/Repair (3)	5.00
Preventive Maintenance/Inspection 3 (HVDD1917)	45.00
Inspect Drivelines (1)	3.00
Inspect and Change U-joints (2)	6.00
Lubrication Levels Inspection/Oil and Filters (3)	12.00

Run Diesel Engine Over Head (4)	6.00
Lab Scopes Diagnostics (5)	10.00
Scanner Diagnostics (6)	4.00
Advanced Oscylliscope Testing (7)	4.00
Preventive Maintenance/Inspection 4 (HVDD1718)	45.00
Air Bag Inspection and Removal (1)	10.00
Trailer Preventive Maintenance/Repair (2)	20.00
Preventive Maintenance Inspection Proficiency Test (3)	15.00
Tooele Tech Recommended Course (0 hours required)	Hours
Diesel Technician (0 hours required)	Hours
Keyboarding Basics (BTEC1000)	30.00
Lesson 1-6 (1)	10.00
Lesson 7-12 (2)	10.00
Lesson 13-18 & final assessment (3)	10.00