

High School to College and Career Pathway: Secondary

Career and Technical Education: Preparing Students for College and Career!



Area of Study: Skilled and Technical Sciences Education

Pathway: Mechanics and Repairs – Heavy Duty Diesel

Get the Facts

In 2006, the Environmental Protection Agency (EPA) imposed stricter emissions standards for diesel trucks. This regulation is designed to reduce diesel truck emissions by 90 percent.

Workforce Trends

Employment growth will result from the increased manufacturing of buses and trucks powered by durable, economical diesel engines. Opportunities are good for those with formal diesel mechanic training and experience with electronic and diagnostic equipment.



CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses		
(Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)		
CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL		
Course #	Foundation Courses: (required)	Credit
47.0605	Diesel Technician*	1.00
47.0613	Medium/Heavy Vehicle Systems	1.00
Elective Courses:		
47.0633	Basic Automotive Collision Repair	.50
47.0105	Basic Electronics	.50
47.0604	Introduction to Automotive	.50
47.0606	Small Vehicle Technician	.50
47.0612	Vehicle Inspection Technician	1.00
47.0624	ASE General Service Technician	1.00
47.0634	ASE Brakes	1.00
47.0644	ASE Steering and Suspension	1.00
47.0654	ASE Electrical/Electronics	1.00
47.0664	ASE Engine Performance	1.00
32.0199	Student Internship (Critical Workplace Skills)	

2.00 credits

1.00 credit

3.00 credits for completion

* Will include advanced Diesel courses.

Visit UtahCTE.org to learn how to earn industry certification in this Pathway.

Heavy Duty Diesel is:

- > High skill
- > High wage
- > High demand
- > Nontraditional for females

Sample Career Occupations

- > Diesel Engine Specialist
- > Heavy Duty Diesel Teacher
- > Mechanics and Repairer Helper

This is a nontraditional occupation for women. In 2007, 5.3 percent of the people employed in this occupation were women.

Middle School		State Requirements		High School Suggested Education Plan				College and Career
7th Grade	8th Grade	Middle School	High School	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts 4.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	Language Arts 12 1.00	There are a number of options for education and training beyond high school, depending on your career goals. <ul style="list-style-type: none"> > Certificate > Associate degree > Bachelor's degree > Professional degree > On-the-job training > Apprenticeship > Military training For more information on salary projections, labor market demand, and training options, visit www.utahfutures.org .
Math * 1.00	Math * 1.00	2.00	Math 3.00	Math * 1.00	Math * 1.00	Math * 1.00		
Science .50	Science 1.00	1.50	Science 3.00	Earth Systems 1.00	Physics 1.00 or Physics with Technology 1.00	Additional Credit 1.00		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies 3.00	Geography for Life .50	World Civilizations .50	U.S. History II 1.00	U.S. Government and Citizenship .50	
P.E. 1.00	Health .50	1.50	P.E./Health 2.00	Participation Skills and Techniques .50	Fitness for Life .50 / Health Education .50 Lifetime Activities or Sport .50			
The Arts .50	The Arts .50	1.00	Fine Arts 1.50	Fine Arts Courses 1.50				
Keyboarding .50			Computer Tech. .50	Computer Technology .50				
CTE Intro 1.00		1.00	CTE 1.00	Refer to Career and Technical Education box above.				

* Talk to your school counselor about math requirements in the new common core curriculum. Core curriculum and elective requirements may vary district to district.

Concurrent enrollment course offerings vary by school and district. Many Utah postsecondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional postsecondary Pathways for details.