



Diesel and Heavy Equipment Technology Diploma

ADMISSION

Program Outcomes

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, and sustainable transportation, depending on the program major area chosen.

Diesel service technician jobs are in high demand and the heavy equipment industry is expecting significant growth this year, and in the years to come. Diesel engines are found in a variety of industries including trucking, farming, construction, power generation, railroad and marine applications to name a few. This drives a need for qualified professionals who can diagnose and repair these types of equipment. Assist in keeping these industries moving by enrolling in our Diesel and Heavy Equipment Technology program. CCC&TI's Diesel and Heavy Equipment program has partnered with Volvo Trucks and Vanguard Truck Centers in order to meet the expected demand for technicians in these high-tech and hands-on careers.

Our experienced instructors will teach you how to inspect, diagnose, repair, service, and maintain medium and heavy-duty truck engines and systems found in locomotives, buses, ships, construction equipment, electricity generators, and trucks over one-ton classification, so you can ensure their safety and performance. After completion of our diesel and heavy equipment program, you will be able to:

- use appropriate service information, tools, equipment, procedures, and technical terminology associated with the industry
- apply the skills necessary to maintain, disassemble, and reassemble the basic systems related to diesel transport and heavy equipment
- test, calibrate, diagnose, and repair complex electronic, pneumatic, and hydraulically-controlled diesel components and equipment
- utilize your awareness of the diverse technologies associated with this dynamic and challenging field
- be prepared to take the Automotive Service Excellence (ASE) Entry-Level Technician exam
- be prepared for employment as an entry-level transportation service technician in dealerships, fleet shops, or independent repair shops nearby, or around the world

CCC&TI has partnered with Volvo Trucks and Vanguard Truck Centers. This partnership enables our Diesel and Heavy Equipment Technology curriculum to also include use of Volvo specific diagnostic tools, as well as training on their vehicle specific systems, and procedures. This additional training prepares CCC&TI students for possible employment with Vanguard Truck Centers or any service center that performs maintenance on Volvo trucks.



**VOLVO
TRUCKS**



Occupational Outlook

The DOL's [Occupational Outlook Handbook](#) states, "Employment of diesel service technicians and mechanics is projected to grow 8 percent from 2020 to 2030, about as fast as the average for all occupations.

About 28,100 openings for diesel service technicians and mechanics are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire."

"As more freight is shipped across the country, additional diesel-powered trucks will be needed to carry freight wherever trains and pipelines are not available or economical. In addition, diesel cars and light trucks are becoming more popular, and more diesel technicians will be needed to maintain and repair these vehicles." Graduates of the curriculum should qualify for entry-level positions within the field.

Admission Steps

- Complete CCC&TI admissions application online at cccti.edu
- Submit official high school/GED/AHS transcripts and college transcripts
- Complete FASFA online at www.studentaid.gov
- Meet placement testing requirements
- Attend information session with program Director. Call Sara Greene to sign up.
- Meet with advisor to register for classes
- Pay for classes and purchase books bundle from bookstore

Important Contact Information

Admissions

Contact Sara Greene, Admissions Specialist, at 828.726.2706 or sgreene@cccti.edu for more information and how to complete the enrollment and registration process.

Financial Aid

Contact Financial Aid at 828.726.2713 as soon as possible to inquire and complete your FAFSA. Check your CCC&TI student email frequently to monitor your Financial Aid status.

Program Director

Contact Matt Smith, Director, Diesel and Heavy Equipment Technology, at 828.726.2263 or msmith@cccti.edu

PROGRAM OFFERINGS – Diploma: Diesel and Heavy Equipment Technology (D60460)

Fall Semester					
TRN	110	Introduction to Transport Technology	Fall Only		2 Credits
TRN	170	PC Skills for Transportation	Fall Only		2 Credits
TRN	120	Basic Transportation Electricity	Fall Only		5 Credits
HET	110	Diesel Engines	Fall Only		6 Credits
				Total	15 Credits
Spring Semester					
COM	120	Intro to Interpersonal Communication	F/S/SS	*Suggested student takes online during S	3 Credits
HET	115	Electronic Engines	Spring Only		3 Credits
HET	231	Med/Heavy Duty Brake Systems	Spring Only		2 Credits
MAT	110	Math Measurement and Literacy	F/S/SS	*Suggested student takes online during S	3 Credits
HET	233	Suspension and Steering	Spring Only		4 Credits
TRN	140	Transportation Climate Control	Spring Only		2 Credits
				Total	17 Credits
Summer Semester					
HET	114	Power Trains	Summer Only		5 Credits
HET	125	Preventive Maintenance	Summer Only		2 Credits
TRN	180	Basic Welding for Transportation	Summer Only		3 Credits
				Total	10 Credits
Diploma Total: 42 Credits					

COST

	Diploma
Tuition (\$76/credit hour)	<p>Fall Semester I \$1,140</p> <p>Spring Semester I \$1,292</p> <p>Summer Semester I \$760</p> <p>Tuition Total \$3,192</p> <p>This program is designed to be completed in 12 months</p>
Additional Fees	<p>\$35 campus activity fee (each semester)</p> <p>\$2/per course (max \$10 per semester) campus service fee</p> <p>\$2 (per semester) student accident insurance</p> <p>Total (per semester) \$47</p>
Textbooks (purchased from CCC&TI Bookstore)	varies
Additional Fees	\$75/ semester for ASE Certification test fees
Safety Boots	<p>Students are required to purchase and wear approved safety boots during all lab activities. The minimum requirement for these boots is a steel or composite safety toe cap.</p> <p>Price varies</p>
Graduation Fee	\$25
Total	approximately \$3,583