# **DIESEL TECHNOLOGY: CP**

Certificate of Proficiency | 42 credit hours minimum

Area of Interest: Advanced Manufacturing, Industrial Occupations, and Transportation

Program Website (https://stlcc.edu/programs-academics/pathways/a-m-i-o-t/diesel-technology/)

Academic Advising (https://stlcc.edu/admissions/advising/)

### **Program Description:**

The Diesel Technology Certificate of Proficiency program is designed to prepare graduates for careers as medium/heavy truck repair technicians. Graduates will be qualified for positions requiring diagnosis and repair of the following truck systems: diesel engines, suspension and steering, brakes, electrical and electronics, preventive maintenance, drive train, and heating, ventilation and air conditioning. Graduates will be competent for entry-level positions in new vehicle dealerships, truck and bus leasing companies, street and highway departments, transit maintenance facilities, fleet carriers, and miscellaneous other vehicle-based operations.

Locations. This program is offered in its entirety at Forest Park.

**Related Programs.** The Diesel Technology Department offers an associate and a certificate in the following areas:

Diesel Technology, Associate in Applied Science (http://catalog.stlcc.edu/programs/diesel-technology/)

Diesel Technology, Certificate of Specialization (http://catalog.stlcc.edu/programs/diesel-technology-certificate-specialization/)

**Cost of Attendance**. For more information on cost of attendance visit MoSCORES (https://scorecard.mo.gov/Search/).

**Program Career and Salary Information.** Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: https://scorecard.mo.gov/scorecard/(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E\_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage

and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

**Interested in this program?** Start the enrollment process by visiting the Apply to STLCC (https://www.stlcc.edu/admissions/apply-to-stlcc/) page.

# At the completion of the program, students are expected to:

- 1. diagnose, service, and repair truck engines.
- 2. diagnose, service, and repair truck braking systems.
- 3. diagnose, service, and repair truck steering and suspension systems.
- 4. diagnose, service, and repair truck electrical and electronic systems.

Credit

- 5. diagnose, service, and repair truck HVAC systems.
- 6. perform truck preventive maintenance.

Title

Code

7. diagnose, service, and repair truck drivetrains and axles.

		Hours
Program Requi	rements	
DIE 100	Introduction to Diesel Technology	3
DIE 101	Diesel Engine Operation and Repair	3
DIE 102	Medium/Heavy Truck Suspension and Steering	3
DIE 103	Medium/Heavy Truck Electricity	3
DIE 105	Diesel Fuel Systems	3
DIE 106	Medium/Heavy Truck Brakes	3
DIE 107	Medium/Heavy Truck Electronics	3
DIE 201	Preventive Maintenance Inspection	3
DIE 202	Co-op Work Experience I-Diesel Technology	3
DIE 203	Truck Heating, Ventilation, and Air Conditioning	3
DIE 204	Service and Parts Management	3
DIE 205	Co-op Work Experience II - Diesel Technology	3
DIE 206	Medium/Heavy Truck Drivetrains	3
ME 101	Welding Technology	3
Total Credit Ho	urs	42

#### **Full-Time Academic Plan**

**PLEASE NOTE:** If you originally enrolled at STLCC prior to Spring 2024, you may need to view an archived catalog (https://www.stlcc.edu/programs-academics/course-catalog/) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

Code	Title	Hours	Prerequisites	Milestones/Notes
First Year				
Fall				
DIE 100	Introduction to Diesel Technology	3	MTH 020 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency	First 8 weeks
DIE 103	Medium/Heavy Truck Electricity	3	Reading Proficiency	First 4 weeks
DIE 107	Medium/Heavy Truck Electronics	3	DIE 103 with a minimum grade of "C" and Reading Proficiency	Second 4 weeks

DIE 201	Preventive Maintenance Inspection	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	Third 4 weeks
DIE 102	Medium/Heavy Truck Suspension and Steering	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	Fourth 4 weeks
	Credit Hours	15		
Spring				
DIE 106	Medium/Heavy Truck Brakes	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	First 4 weeks; Apply for Certificate of Specialization - Diesel Technology.
DIE 101	Diesel Engine Operation and Repair	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	Second 4 weeks
DIE 105	Diesel Fuel Systems	3	DIE 100, DIE 101, and DIE 107 with minimum grades of "C"; and Reading Proficiency	Third 4 weeks
DIE 203	Truck Heating, Ventilation, and Air Conditioning	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	Fourth 4 weeks
ME 101	Welding Technology	3	Reading Proficiency	
	Credit Hours	15		
Summer				
DIE 202	Co-op Work Experience I-Diesel Technology	3	DIE 102, DIE 106, and DIE 107 with minimum grades of "C"; and Reading Proficiency	First 4 weeks
DIE 205	Co-op Work Experience II - Diesel Technology	3	Reading Proficiency	Second 4 weeks
	Credit Hours	6		
Second Year				
Fall				
DIE 206	Medium/Heavy Truck Drivetrains	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	First 4 weeks; Apply for graduation.
DIE 204	Service and Parts Management	3	Reading Proficiency	Second 4 weeks
	Credit Hours	6		•
	Total Credit Hours	42		

<sup>\*</sup>Click on the hyperlinked course number to view additional information about the course.

## **Part-Time Academic Plan**

**PLEASE NOTE**: If you originally enrolled at STLCC prior to Spring 2024, you may need to view an archived catalog (https://www.stlcc.edu/programs-academics/

 $course-catalog/) for your correct program \ requirements. \ Please \ speak \ with \ an \ advisor \ or \ the \ program \ coordinator \ for \ more \ information.$ 

Code First Year	Title	Hours	Prerequisites	Milestones/Notes
DIE 100	Introduction to Diesel Technology	3	MTH 020 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency	First 8-weeks
DIE 103	Medium/Heavy Truck Electricity	3	Reading Proficiency	First 4 Weeks

<sup>\*\*</sup>Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

<sup>\*\*\*</sup> It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.

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DIE 107	Medium/Heavy Truck Electronics	3	DIE 103 with a minimum grade of "C" and Reading Proficiency	Second 4 weeks
	Credit Hours	9		
Spring				
DIE 106	Medium/Heavy Truck Brakes	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	First 4 weeks
DIE 101	Diesel Engine Operation and Repair	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	Second 4 weeks
DIE 105	Diesel Fuel Systems	3	DIE 100, DIE 101, and DIE 107 with minimum grades of "C"; and Reading Proficiency	Third 4 weeks
	Credit Hours	9		
Second Year			·	
Fall				
DIE 201	Preventive Maintenance Inspection	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	
DIE 102	Medium/Heavy Truck Suspension and Steering	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	Apply for Certificate of Specialization - Diesel Technology.
DIE 206	Medium/Heavy Truck Drivetrains	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	
	Credit Hours	9		
Spring			,	
DIE 203	Truck Heating, Ventilation, and Air Conditioning	3	DIE 100 with a minimum grade of "C" and Reading Proficiency	
ME 101	Welding Technology	3	Reading Proficiency	
DIE 204	Service and Parts Management	3	Reading Proficiency	
	Credit Hours	9		,
Summer			· 	
DIE 205	Co-op Work Experience II - Diesel Technology	3	Reading Proficiency	Apply for graduation.
DIE 202	Co-op Work Experience I-Diesel Technology	3	DIE 102, DIE 106, and DIE 107 with minimum grades of "C"; and Reading Proficiency	
	Credit Hours	6		
	Total Credit Hours	42		

 $<sup>{}^\</sup>star \text{Click}$  on the hyperlinked course number to view additional information about the course.

<sup>\*\*</sup>Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

<sup>\*\*\*</sup> It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.