

PROGRAM: Diesel Engine Repair

**PROGRAM
CIP CODE:** 47.0600.40

DESCRIPTION: The **Diesel Engine Repair** program is designed to prepare individuals for jobs as technicians in the automotive fields. The program is comprised of a core curriculum and Diesel Engine Repair I and II. Diesel Engine Repair Technology includes units on repair, service, and maintenance of diesel engines in vehicles such as automobiles, buses, trucks and construction equipment; as well as stationary diesel engines in electrical generators and related equipment. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and leadership and personal development through the Career and Technical Student Organization, SkillsUSA.

RECOMMENDED PROGRAM SEQUENCE OF COURSES:

Career Preparation The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

47.0600.10 **Transportation Technologies Core Curriculum:** This program prepares the student to apply technical knowledge and skills in the safety, adjustment, maintenance, part replacement, and use of tools, equipment and machines. The course includes developing career plans, preparing for employment, participating in work-based learning experiences, demonstrating oral and written communication skills, understanding financial operations of small businesses, identifying characteristics of successful leaders in the work place and participation in leadership development activities.

-and-

47.0600.40 **Diesel Engine Repair I:** This course prepares the individuals to apply technical knowledge and skills to repair service and maintain diesel engines and related equipment.

-and-

47.0600.45 **Diesel Engine Repair II:** This course prepares the individual to apply higher levels of technical knowledge and skills to repair vehicles such as buses, trucks, ships, railroad locomotives construction equipment and related equipment.

And program may elect to add:

47.0600.75 **Transportation Technologies - Internship:** This course provides CTE students an opportunity to engage in learning through participation in a structured work experience that can either be paid or unpaid and does not necessarily require classroom instruction that involves the application of previously developed Transportation Technologies knowledge and skills.

-or-

47.0600.80 **Transportation Technologies - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning experiences related to the standards identified for the Transportation Technologies program.

TEACHER CERTIFICATION REQUIREMENTS FOR THE DIESEL ENGINE REPAIR PROGRAM
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CAREER PREPARATION: The instructor must be vocationally certified according to the following table
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Diesel Engine Repair	CERTIFICATES
	Types: PCTI, PCTIEP, SCTI, SCTIEP
Note:	
<ul style="list-style-type: none"> ▪ Transportation Technologies, 47.0600.70 may be a part of the sequence and the teacher must hold a Cooperative Education Endorsement (CEN). ▪ Teacher/Coordinator 47.0600.75 is not required to have a Cooperative Education Endorsement (CEN). ▪ Teacher/Coordinator 47.0600.80 is required to have a Cooperative Education Endorsement (CEN). 	

CERTIFICATE ABBREVIATIONS FOR THE DIESEL ENGINE REPAIR PROGRAM

Certificate Types	
PCTI	Provisional Career and Technical Education Industrial Technology
PCTIEP	Provisional Career and Technical Education Industrial and Emerging Technologies
SCTI	Standard Career and Technical Education Industrial Technology
SCTIEP	Standard Career and Technical Education Industrial and Emerging Technologies