



HEAVY EQUIPMENT OPERATION & MAINTENANCE

A two-year program for students interested in a hands-on learning approach utilizing a wide variety of construction equipment. This program is based on the National Center for Construction Education and Research (NCCER) Contren™ Learning Series for Heavy Equipment and Repair. For more information about NCCER, visit nccer.org.

- Students learn to operate, maintain, diagnose, and repair construction-related equipment such as backhoes, bulldozers, bucket loaders, excavators, dump trucks, and skid steers.
- The program enjoys a corporate collaboration with Milton/Caterpillar, and Bobcat among others, through which students receive specialized training at their corporate sites, as well as instructional opportunities at our education centers, field trip experiences, internships, and job shadowing opportunities.
- Curriculum includes commencement level math and English language arts.
- All students are given the opportunity to participate in a Work-based Learning experience, which exposes them to the operation of a business and specific job duties related to careers in their CTE area. This internship is designed to connect the skills and knowledge learned in the CTE classroom with the real world requirements of a business.



Curriculum includes:

- Introduction to the trade
- Heavy equipment safety
- Identification of heavy equipment
- Basic operational techniques
- Tractors
- Grades and slopes
- Diesel engines
- Hydraulics
- Air Brakes

Certifications & Endorsements

- NCCER certifications by module
- Industrial Lift Truck Certification (OSHA Standard 1910.178)
- Commercial Driver's License (CDL-B)

Students completing the program successfully qualify to work as:

- Entry-level mechanic
- Driver Class B CDL
- Construction laborer/Equipment Operator
- Industrial Forklift Operator

Employment opportunities requiring further education:

- Truck repair shop mechanic
- Foreman (shop or work site)
- Service writer
- Dealership management
- Civil Engineer
- Sales/Product Mangement



CAREER AND TECHNICAL EDUCATION

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CTE is a Division of the WSWHE BOCES