

The Diesel Technology Program at Clark College provides hands-on experience working on the latest industry products and diagnostic tooling.

Our equipment features the latest in technology, some of which includes:

- Seven hydraulic trainers that allow students to build over 60 different hydraulic and hydrostatic circuits and experiments.
- Over 30 diesel engines, 11 that are computer-controlled including Caterpillar®, Duramax®, Cummins®, Mercedes®, Navistar®, and Detroit Diesel®.
- One ARA Hetra 60,000 lb. capacity vehicle hoist.
- Caterpillar® equipment that includes a D5M track-type tractor, 416 backhoe loader, 252 skid steer loader and D3B track-type tractor.
- Four trucks including Freightliner® heavy and medium duty with Cummins®, Detroit Diesel® and Mercedes® electronic engines and antilock brakes and light duty that includes Duramax® engines, Allison® transmissions and antilock brakes.
- One new Hyster® 5000 lb. capacity forklift.
- One bridge crane and three new jib cranes.
- Hundreds of individual hydraulic and drive train components including Vickers®, Caterpillar®, Rex-Roth®, Sun®, Prince®, Eaton-Fuller®, Rockwell®, and Allison®.
- Eleven shop PCs loaded with the latest diagnostic software and diagnostic programs such as Cat Basics®, Cat Electronic Technician®, Mitchell®, All Data®, and Cummins In-Site®.
- Electronic diagnostic tooling such as Snap-on Modis®, Cat ET®, and Pro-Link®.
- Engine Dynamometer.
- New large enclosed rotary parts washer.

The Clark College Diesel Technology shop is a well-lit, heated, 10,000-square-foot facility with overhead and jib cranes and state-of-the-art equipment and tooling to help facilitate student learning in a hands-on environment. In addition, the program has 4 classrooms, 2 of which are “smart” classrooms with LCD projectors.

### Program Faculty Contacts

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## College Abilities

Clark College has identified six college-wide abilities that help students apply what they learn. The core abilities are taught across the curriculum and students continually practice and improve their skills in the six areas.

### Communication

The ability to understand and deliver written, spoken and visual communication clearly and accurately.

### Critical Thinking/Problem Solving

The ability to formulate, evaluate and synthesize facts, data, ideas, assumptions, values and points of view.

### Effective Citizenship

The ability to identify community issues; evaluate and respect various opinions and values; and articulate one’s own perspective.

### Global/Multicultural Perspectives

The ability to identify, analyze and demonstrate how culture shapes world perceptions, values and behaviors.

### Lifelong Learning

The ability to set and revise goals, access resources and assume responsibility for one’s own learning.

### Information/Technology

The ability to identify resources; retrieve and manage data; interpret, evaluate and use information; and adapt to changing technologies.



Clark College does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, sexual orientation, gender identity, gender expression, political affiliation, creed, disabled veteran status, marital status, honorably discharged veteran or Vietnam-era veteran status in its programs and activities.

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## Technology Programs

# Diesel Technology



- Certificate of Proficiency in Diesel Technology
- Associate in Applied Science Degree in Diesel Technology
- Two-year programs



# Diesel Technology

The diesel technician must be able to work on a great variety of equipment and their component parts. These include brake systems, drive trains, electrical and electronic circuits, hydraulic systems, and diesel engines. Diesel power is used in the transportation industry in light, medium, and heavy-duty trucks and in industrial applications such as heavy equipment, agriculture, marine propulsion, power generation, and locomotives.

Because of the widespread use of this type of power, diesel technicians can work in a shop or outdoors as a field service technician. This program is designed to prepare students for entry-level positions into the diesel technician trade. Diesel program instruction includes both classroom theory and extensive hands-on experience in the shop where the student encounters real day-to-day problems.

The diesel evening program includes courses for Caterpillar, Cummins, and Detroit engines; electronic controls; and industrial hydraulics for technicians who wish to further their knowledge and skills. Any course in the program can be made available to area employers and their employees.

Students must complete all major area courses with a minimum grade of "C" or better in order to successfully complete the program and earn the award.



## Diesel Technology

*Certificate of Proficiency*

### Major Area Requirements

#### First Quarter (Fall)

DIES	111	Diesel Fundamentals	5 credits
DIES	112	Diesel Procedures	10 credits
DIES	120	Basic Electrical	3 credits
MATH	085	Industrial Mathematics	5 credits
or	030	Pre-Algebra	5 credits

#### Second Quarter (Winter)

DIES	113	Diesel Engines/Fuel Systems	5 credits
DIES	114	Diesel Procedures	10 credits
DIES	121	Electronic Engine Management Systems	3 credits

#### Third Quarter (Spring)

DIES	115	Drive Trains	5 credits
DIES	116	Diesel Procedures	10 credits
DIES	122	Electronic Vehicle Management Systems	3 credits
ENGL	097	Writing Fundamentals	3 credits

#### Fourth Quarter (Fall)

DIES	221	Electrical/Electronic Systems	5 credits
DIES	222	Diesel Procedures	6 credits

#### Fifth Quarter (Winter)

DIES	223	Hydraulic Systems	5 credits
DIES	224	Diesel Procedures	10 credits

#### Sixth Quarter (Spring)

DIES	225	Brakes, Steering, and Suspension	5 credits
DIES	226	Diesel Procedures	10 credits
CMST&	230	Small Group Communication	5 credits
or	210	Interpersonal Communication	5 credits

### Suggested Extra Courses

#### For preparation into trade

BUS	110	Customer Service	3 credits
DIES	093	Detroit Diesel Electronic Controls	3 credits
DIES	096	Cummins Engines	3 credits
DIES	099	CAT Engines	3 credits
DIES	135	Industrial Hydraulics	3 credits
IFA	031	Industrial First Aid	1 credit

**Total Credits Required** **108 credits**  
(including General Education Requirements)

Refer to the Degree & Certificate Requirements section in the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

## Diesel Technology

*Associate in Applied Science Degree*

### Major Area Requirements

In addition to completing all courses for the Certificate of Proficiency, students must also complete all other requirements as prescribed in the Degree & Certificate Requirements section of the Clark College Catalog.

**Total Credits Required** **120-122 credits**  
(including General Education Requirements)

*Note: ENGL 097 does not meet the communication skills general education requirement for the AAS degree.*

Refer to the Degree & Certificate Requirements section in the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.



### Employment Opportunities

Clark College has been a key resource in the development of the Southwest Washington industrial community for nearly half a century by providing a skilled entry-level workforce and re-training for veteran employees.

Clark's Diesel Technology program has a history of placing over 95% of its graduates into entry-level positions. Graduates are employed as:

- Service Technicians
- Shop Foremen
- Maintenance and Apprentice Technicians
- Factory Representatives
- Superintendents
- Warranty Representatives

Others specialize in the repair of specific systems such as hydraulics, electrical, cab climate, engine and truck or heavy equipment.

Entry level wages for graduates in these fields range from \$32,000 to \$38,000 per year, depending on employer and position. Journeyman level positions often have annual wages from \$44,000 to \$60,000, depending on employer and position.

[www.clark.edu](http://www.clark.edu)

For more information, see the Clark College Catalog or contact the Technology Programs Advisor at (360) 992-2309 or by email: [bvogler@clark.edu](mailto:bvogler@clark.edu)  
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