The diesel/heavy equipment certificate offers training in maintenance and repair of heavy equipment and trucks. Students will learn to work on electrical and air systems, diesel engines, engine electronics, hydraulics, air systems, transmissions, differentials, crawler tractor undercarriages, steering and final drives. The program emphasizes hands-on training and in-class experience as students perform preventative maintenance inspections, determine causes of equipment problems and make necessary repairs and adjustments from tune-ups to complete engine and equipment rebuilding.

Diesel mechanics may be hired as mechanics on engines, automatic transmissions, drive trains, electrical systems, suspension and steering, hydraulics and air systems. Diesel mechanics diagnose, repair, weld, and fine-tune the working parts of buses, trucks, construction machinery, and generators. Demand is on the rise for highly skilled diesel and heavy equipment mechanics. Students completing this program are qualified to work for independent diesel and heavy equipment repair businesses, contractors, mines and machinery dealerships. Salaries vary depending on job placement and the student’s skill level.
COURSE OFFERINGS

Please see the current catalog for complete degree information.

1) Complete the general university requirements. (see UAF Catalog)
2) Complete the certificate requirements. (see UAF Catalog)
3) Complete the following program (major) requirements:
   - DSLT 101 Safety: Includes Rigging & Lifting (1)
   - DSLT 103 Basic Equipment & Truck Operation (1)
   - DSLT 105 Preventative Maintenance (3)
   - DSLT 107 Basic Electrical Systems & Electronic Fuel Injection (3)
   - DSLT 110 Basic Industrial Fabrication (2)
   - DSLT 111 Diesel Emissions (2)
   - DSLT 123 Heavy Duty Braking Systems (3)
   - DSLT 154 Diesel Fuel Injection (3)
   - DSLT 201 Manual Transmissions & Differentials (3)
   - DSLT 202 Heavy Duty Automatic Transmissions (2)
   - DSLT 210 Advanced Heavy Equipment Fabrication (2)
   - DSLT 254 Engines (5)
   - MECN 103 Starting and Charging Systems (3)
   - MECN 210 Hydraulics (3)

Minimum credits required - 36 credits

*Students must earn a C grade or better.

PROGRAM HIGHLIGHTS

The shop is equipped with the latest tools and equipment, to ensure the education and training received is current with industry standards. Class size is limited, so students receive individual help and attention. The instructors are all experienced professionals who not only have excellent technical skills and knowledge, but they know how to communicate that knowledge to their students.

OTHER DETAILS

As part of the certificate requirements, the communication, human relations, and computation content is embedded in the major required courses for this program. Students planning to go on to an associate or bachelor’s degree need to work closely with their advisors and are encouraged to select courses meeting core requirements and courses designated within majors and minors. Only those courses with an “X” designator count toward the baccalaureate core. A student may request credit by examination for any DSLT or MECN class. See department coordinator for details.

APPLICATION PROCESS

- Review admission requirements with an advisor by calling 907-455-2932 or email mmhuerd@alaska.edu
- Apply for admission to UAF: www.uaf.edu/admissions/
- Apply for financial aid: www.uaf.edu/finaid/ or call 907-455-2832
- Find classes & register: www.uaf.edu/coursefinder/
- Get your books & class materials organized - UAF Bookstore: www.uaf.bookstr.com
- Start your journey at UAF CTC!

PROGRAM CONTACT

Megan Huerd
Administrative Assistant, Diesel/Heavy Equipment
Hutchison Center, 3770 Geist Road, Fairbanks AK 99709
907-455-2932
907-455-2919 fax
mmhuerd@alaska.edu