

Diesel Equipment Technician

Associate of Applied Science Degree (A340)

Required Courses

Required Discipline Courses (49 credits)

DHET 1101	Diesel Equipment Fundamentals.....	2 cr
DHET 1107	Electrical Theory	3 cr
DHET 1108	Electrical Lab.....	5 cr
DHET 1117	Engine Theory.....	3 cr
DHET 1118	Engine Lab	5 cr
DHET 1123	Customer Service/Service Management	1 cr
DHET 1125	Hydraulic Theory	3 cr
DHET 1126	Hydraulic Lab	5 cr
DHET 1128	Power Trains Theory.....	2 cr
DHET 1129	Power Trains Lab	5 cr
DHET 1130	Diesel Internship.....	2 cr
DHET 1132*	On Highway Vehicle Systems Theory	3 cr
DHET 1133*	On Highway Vehicle Systems Lab	4 cr
HEOM 1165	CDL.....	3 cr
MATH 1500	Applied Math.....	3 cr

Required MnTC Courses (15 credits)

An A.A.S. degree requires a minimum of 15 credits selected from at least three of the ten goal areas of the Minnesota Transfer Curriculum (MnTC).

ENGL 1422	Practical Writing (Goals 1,2)	3 cr
Minnesota Transfer Curriculum courses		12 cr

*Denotes Prerequisites

GRADUATION REQUIREMENT - 64 CREDITS

Description

The Diesel Equipment Technician Diploma is an eleven-month program that includes an accelerated six-week summer session. The Diesel Technician Associate of Applied Science (A.A.S.) Degree consists of all coursework from the diploma program, plus commercial driver's license training and internship experience, and an additional 12 credits of General Education courses from at least three of the 10 goal areas of the Minnesota Transfer Curriculum (MnTC). This program concentrates on the power train, hydraulic/hydrostatic, electrical/electronics, and engine systems of off-road construction equipment such as crawlers, excavators, backhoes, front end loaders, motor graders, and skid steer loaders.

Outcomes

By completing this program, students will achieve the following learning outcomes:

- Apply safe shop and equipment practices;
- Demonstrate proper use and care of shop and personal tools;
- Inspect, diagnose, and conduct failure analysis and perform preventative maintenance inspections in electrical, hydraulic, engines and power train systems;
- Use service resources and software technologies;
- Apply fundamental skills and concepts to problem solving situations;
- Communicate effectively in diesel mechanics industry situations; and
- Demonstrate a high level of craftsmanship and professionalism.

Pre-Program Requirements

Students enrolled in this program must supply their own basic tool sets. A guideline of what tools are needed is available from admissions.

For insurance purposes, internships may require that students be 18 years old.

Some courses may require students to meet College Placement Levels in reading, writing, and/or math. See an advisor for more information.

Graduation Requirements

In addition to the program requirements, students must meet the following conditions in order to graduate:

- College Cumulative GPA Requirement: cumulative grade point average (GPA) of credits attempted and completed at CLC must be at least 2.0;
- College Technical Core GPA Requirement: cumulative GPA of credits attempted and completed towards the technical core of the diploma or degree must be at least 2.0;
- Residency Requirement: students must complete 25% of their credits at Central Lakes College.

Career and Transfer

The Diesel Equipment Technician program prepares students for careers in maintenance, repair, and diagnostics of diesel equipment.

Graduates find employment at any of the following:

- original equipment manufacturing dealerships
- construction contractors
- independent repair facilities
- federal, state and local government agencies
- related forestry, mining, and petroleum industries

Career titles may include:

- Diesel and Heavy Equipment Technician
- Diesel Maintenance Technician
- Heavy Equipment Technician
- Heavy Truck Technician
- Diesel Technician
- Diesel Mechanic

Accreditation

This program is accredited by Associated Equipment Distributors (AED) Foundation.

Academic Plan

Semester One (20 credits)

DHET 1101 Diesel Equipment Fundamentals2 cr
MATH 1500 Applied Math.....3 cr

The following courses are offered in fall and spring semester:

DHET 1125 Hydraulic Theory3 cr
DHET 1126 Hydraulic Lab.....5 cr
DHET 1128 Power Trains Theory2 cr
DHET 1129 Power Trains Lab.....5 cr

Semester Two (20 credits)

DHET 1123 Customer Service/Service Management.....1 cr
ENGL 1422 Practical Writing.....3 cr

The following courses are offered in fall and spring semester:

DHET 1107 Electrical Theory.....3 cr
DHET 1108 Electrical Lab5 cr
DHET 1117 Engine Theory3 cr
DHET 1118 Engine Lab5 cr

Semester Three (Summer) (12 credits)

DHET 1130 Diesel Internship2 cr
DHET 1132* On Highway Vehicle Systems Theory3 cr
DHET 1133* On Highway Vehicle Systems Lab.....4 cr
HEOM 1165 CDL3 cr

Semester Four (Fall) (12 credits)

Minnesota Transfer Curriculum courses12 cr