

HEAVY EQUIPMENT AUXILIARY SYSTEMS CERTIFICATE IN APPLIED SCIENCE

Program Description

This certificate focuses on semi-trailer, auxiliary power unit, advanced braking and advanced drive train system troubleshooting, diagnostics and repairs.

Mission Statement

The mission of the Heavy Equipment Auxiliary Systems Certificate is to enhance the study and practices of students in additional and exterior units that are crucial to the diesel industry, such as machine hydraulics and auxiliary power units and trailers, to be in compliance with federal and state regulations.

Entrance Requirements

High school diploma or GED required (or department head approval)

Completion of the "Diesel Equipment Technology" certificate is highly recommended prior to taking this certificate.

Type of Program

Evening Spring Semester

Employment Opportunities

Truck repair shops, fleet service, heavy equipment repair centers, electric power generation, locomotive industries

Visit our web page at <https://www.gvltec.edu/diesel/>.

Recommended Program Schedule

Listed below is the ideal grouping of courses in order by semester. This plan assumes a full-time schedule. Note, however, that many variables can affect this plan, and not every course is offered every semester. Please see your advisor to map out your own personalized progression toward graduation.

Note: Please contact your advisor for recommended evening schedules.

First Semester is offered in the fall.

Second Semester is offered in the spring.

Third Semester is offered in the summer.

Fourth Semester is offered in the fall.

First Semester		Hours
DHM 255	Air Brake Systems (fast-track course) ¹	3
Total Semester Hours		3
Second Semester		
DHM 101	Introduction to Diesel Engines (fast-track course) ¹	4

DHM 121	Introduction to Diagnostic Testing (fast-track course) ¹	2
DHM 265	Hydraulic Systems (fast-track course) ¹	3
Total Semester Hours		9
Third Semester		
DHM 232	Heating, Cooling, & Air Condition System ¹	3
Total Semester Hours		3
Fourth Semester		
DHM 155	Power Trains (fast-track course)	3
DHM 262	ABS and TCS Brake Systems (fast-track course)	2
DHM 271	Auxiliary Power Units (fast track course)	2
DHM 272	Trailer Technology (fast-track course)	4
Total Semester Hours		11
Total Required Credit Hours		26

¹ Prerequisite courses - students must complete these courses with a grade of "C" or better before advancing to the core courses for this certificate.