COURSES

ELECTRONICS

ELN-112 Diesel Electronics System Lec 2 Lab 6 Clinic 0 Credit 4

This course introduces electronic theory and applications as used in medium and heavy duty vehicles. Emphasis is placed on the basic function and operation of semiconductor and integrated circuits. Upon completion, students should be able to identify electronic components, explain their use and function, and use meters and flow charts to diagnose and repair systems.

Co-Requisites: None
Pre-Requisites: None

ELN-231 Industrial Controls Lec 2 Lab 3 Clinic 0 Credit 3

This course introduces the fundamental concepts of control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret schematics and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

Co-Requisites: None
Pre-Requisites: None

ELN-275 Troubleshooting Lec 1 Lab 3 Clinic 0 Credit 2

This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers' specifications.

Co-Requisites: None
Pre-Requisites: None