

Minnesota State College Southeast

DESL 1210: Diesel Electrical Systems

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 2

Lab Hours/Week: 4

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course builds on the knowledge gained from the Intro to Electrical and Battery Service course. This course will apply this knowledge and expand to cover other purposes and functions of the various truck electrical systems, including components and instruments. Electrical theory, application and diagnosis using typical test equipment will also be covered. (Prerequisites: AUTO1206) (4 credits: 2 lec/2 lab)

B. COURSE EFFECTIVE DATES: 11/26/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Starting Systems
2. Charging Systems
3. Batteries (electrical storage devices)
4. Various other components, including: wiring and lights
5. Schematic drawings

D. LEARNING OUTCOMES (General)

1. Describe, identify, inspect, test, adjust, service, remove, replace and reassemble starters and components associated with the starting system
2. Describe, identify, inspect, test, adjust, service, remove, replace and reassemble alternators/generators and other components associated with the charging system
3. Describe, identify, inspect, test, service, remove, and replace batteries and other electrical storage devices related to electrical systems
4. Describe, identify, inspect, test, adjust, service, remove, replace and reassemble wiring, lights and other components used in various electrical systems located on the tractor and trailer
5. Diagnose and trouble-shoot various common electrical system related complaints/issues/codes
6. Ability to read and interpret basic electrical and diagnostic diagrams

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted