TRANSFORMERS I — ELLW 1160

A. Course Description

- Credits: 4.00
- Lecture Hours/Week: 4.00
- Lab Hours/Week: 0.00
- OJT Hours/Week: 0
- Prerequisites: None
- Corequisites: None
- MnTC Goals: None

This course covers the theory and applications of transformer principles of magnetic and electrical circuits for primary and secondary connections. Understanding of polarities, types and possibilities of connections, with the needed information for choosing the loading, transformer types and sizes, and the fusing of the same. Prerequisites: ELLW1130 and concurrent enrollment in ELLW1162

B. Course Effective Dates: 3/21/98 – Present

C. Outline of Major Content Areas

As noted on course syllabus

D. Learning Outcomes

1. Define and identify Wye and Delta primary and secondary connections, polarity, coil ratings and installation.
2. Identify series and parallel coil connections and secondary series and parallel bus connections.
3. Determine winding ratio, overload capabilities, fusing size, and grounding requirements
4. Single phase transformer installation, over voltage and current protection, nameplate identification, and trouble shooting.

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

F. Learner Outcomes Assessment

As noted on course syllabus

G. Special Information

None noted