

Anoka Technical College

ETEC 1250: Digital I

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: ETEC 2137

MnTC Goals: None

This course provides an introduction to digital electronics. The emphasis is on the operation, application, and troubleshooting of logic gates. This course also covers Boolean algebra, number system conversion, combinational and sequential logic. Troubleshooting digital circuits is emphasized throughout the course. (Prerequisite: None)(2 credits lecture/1 credit lab)

B. COURSE EFFECTIVE DATES: 08/12/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Logic gates
2. Boolean algebra
3. Number system conversion
4. Systematic troubleshooting

D. LEARNING OUTCOMES (General)

1. Demonstrate professional behavior, compliance with safety procedures, and working as a team member where appropriate.
2. Demonstrate basic digital concepts.
3. Convert between different numbering systems.
4. Simplify logic circuits using Boolean algebra.
5. Design and build basic digital circuits.
6. Analyze timing diagrams.
7. Troubleshoot logic circuits.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted