NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

ETR 261 - MICROPROCESSOR APPLICATION I (4 CR.)

COURSE DESCRIPTION

Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

GENERAL COURSE PURPOSE

ETR 261 is designed as a one semester, lecture and laboratory concerned with the basic principles of microprocessors and microcomputers.

ENTRY LEVEL COMPETENCIES

Prerequisite: ETR 167 - "Logic Circuits and Systems I"

COURSE OBJECTIVES

As a result of the learning experiences provided in this course, the student should:

A. know the principles of counters and registers
B. know the fundamentals of microprocessors and microcomputer systems

MAJOR TOPICS TO BE INCLUDED

LECTURE

A. The computer bus system
B. Introduction to I/O and memory
C. Timing/multiplexing
D. Introductory Assembly language programming
E. Basic I/O & interfacing techniques
F. Introduction to 16 bit microprocessors

LABORATORY

A. MMD-1 Familiarization
B. Bit comparison
C. Port selection
D. MMD-1 key board
E. Memory expansion
F. Machine cycles
G. D/A conversion
H. A/D conversion