

Global Learning Semesters

Course Syllabus

Course: CENG-280 Microprocessors

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
CENG-280	Microprocessors	3
Semester Offered	Contact Hours	Prerequisites
Spring	42	CENG-200 Digital Systems I. Introduction to basic analysis and design of digital and computer systems.
Department	Level of Course	Language of Instruction
Engineering	Lower Division	English

Course Description

The course is designed to introduce the student to microprocessor programming and operation principles, and to demonstrate the merging of software and hardware concepts into firmware in microprocessor-based systems. The 16-bit microprocessor is introduced and emphasized as a component for an electronic system rather than as the basis of a computer. Furthermore, instructions for the 80286, 80386, 80486, Pentium, and Pentium Pro processors are compared and contrasted with the 8086/8088 microprocessors.

Instructor

Mr. Andreas Serghiou

Course Aims and Objectives

To introduce students to microprocessor programming and operation principles, and to demonstrate the merging of software and hardware concepts into firmware in microprocessor-based systems.

Teaching Methods

The course is delivered through lectures, lab presentations, and practical exercises and assignments.

Course Teaching Hours

The course is 42 hours long and is delivered in 14 weeks (3 hours/week).

Evaluation and Grading

Participation: 5%
Homework: 10%
Test I: 20%

Test II: 25%
Final Exam: 40%

Readings and Resources

Required Textbook

Barry B. Brey, The Intel Microprocessors 8086/8088,80186/80188, 80286, 80386, 80486, Pentium, and Pentium Pro Processor, Sixth Edition, Prentice Hall, 2003

Recommended Reading

Muhammed A. Mazidi, Janic G. Mazidi, The 80x86IBM PC and Compatible Computers (volumes I&II), Third Edition, Prentice Hall, 2000