

Global Learning Semesters

Course Syllabus

Course: CENG-300 Digital Systems II

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
CENG-300	Digital Systems II	3
Semester Offered	Contact Hours	Prerequisites
Fall	42	CENG-200 Digital Systems I. Fundamentals of digital logic gates, digital circuits and systems.
Department	Level of Course	Language of Instruction
Engineering	Upper Division	English

Course Description

This course is a continuation of Digital Systems I (CENG-200) and deals with sequential logic circuits: flip-flops, programmable logic devices, counters, shift registers, memories, and interfacing (A-D and D-A conversion). The course is enriched with hardware description language (HDL) representation and simulation of the logic circuits and includes the design of embedded systems.

Instructor

Dr. George Gregoriou

Course Aims and Objectives

To teach the students sequential applications of digital logic gates, digital circuits and systems.

Teaching Methods

The course is delivered through a mixture of lectures and projects.

Course Teaching Hours

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

Evaluation and Grading

Homework/Projects:	20%
Mid-Term Exam:	30%
Final Exam:	50%

Readings and Resources

Required Textbook

Thomas L. Floyd, Digital Fundamentals, Eighth Edition, Prentice Hall, 2003

Recommended Readings

- Morris M. Mano, Charles R. Kime, Logic and Computer Design Fundamentals, Second Edition, Prentice Hall, 2000
- D. Gajski, Principles of Digital Design, Prentice Hall, 1997
- Garrod and Borns, Digital Logic Analysis, Application and Design, Saunders College Publications, 1991