

CC441 Fundamentals of Microprocessors

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Lab.	
CC312	4	7	2	2		3

COURSE AIM

Is to have an in depth knowledge of the architecture and programming of 8-bit and 16-bit Microprocessors and to study how to interface various peripheral devices with them.

COURSE WEEKLY CONTENTS

- 1 Introduction to Computer Organization Concepts
- 2 Design of Simple CPU
- 3 Design of Simple CPU Control
- 4 Assembly Language Programming
- 5 Arithmetic Instructions and Programs.
- 6 Logic Instructions and Programs
- 7 7th week exam.
- 8 8088 Microprocessor
- 9 8284 and 8288 Supporting Chips
- 10 8-bit Section of ISA Bus.
- 11 Semi-Conductor Memory Fundamentals
- 12 12th week Exam
- 13 Memory Address Decoding, IBM PC Memory Map
- 14 8088 Input/Output Instructions, Programming and Interfacing the 8255
- 15 Project Presentation + Revision

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	20 M I D T E R M	5	5				30
8 to 12	15 1 2 T H W E E K E X A M		5				20
13 to 15		5			5 T E R M P R O J E C T		10
16 or 17	40 Final						40
Total	75	10	10	0	5	0	100

REFERENCES

Textbook	80x86 IBM PC and compatible computers by Muhammad Ali Mazidi and Janice Gillispie Mazidi, Prentice Hall, latest edition
Other	Intel Microprocessors y Barry B. Brey, Prentice Hall, latest edition
