

COURSE CODE	COURSE NAME	SEMESTER	CREDITS		
			T	L	ECTS*
151227443	MICROPROCESSOR	SPRING	3	0	5

INSTRUCTOR NAME	LANGUAGE	COURSE TYPE**			
		CORE		ELECTIVE	
				X	
		Technical	Design	Other	
X					

COURSE EVALUATION			
	ACTIVITY	Number	Percentage (%)
MID-TERM	Written exam	1	20
	Quiz		
	Homework	5	50
	Project		
	Laboratory		
	Other (.....)		
FINAL	Oral exam		
	Homework + Oral exam		
	Project + Oral exam		
	Written exam	1	30
	Other (.....)		
MAKE-UP EXAM**	Oral	Written	Oral and Written
		X	Multiple Choice

COURSE CONTENT	MICROPROCESSORS IN SYSTEM AND APPLICATIONS
COURSE OBJECTIVES	Z80 MICROPROCESSOR, USING Z80 PERIPHERALS, USING DIGITAL AND ANOLOG INPUT OUTPUT UNITS
COURSE AIMS	TAKING Z80 MICROPROCESSOR FOR A PILOT PROCESSOR AND DEVELOPING SOFTWARE TECHNIQUES FOR INDUSTRIAL APPLICATIONS
TEXTBOOK(S)	Z80 MANUAL&DATA SHEETS, RBT80 EDUCATIONAL TRAINING SET'S USER MANUAL
REFERENCES	1. BREY-MICROPROCESSORS/HARDWARE INTERFACING&APPLICATIONS 2. ZILOG-COMPONENTS DATA BOOK 3. Z80 RELATED INTERNET SITES

* ECTS (European Credit Transfer System).

** Place (X) as appropriate.

WEEK	SUBJECTS / TOPICS
1	Microprocessors in General
2	Z80 Overview
3	Z80 Instruction Set , Using Mnemonic Assembler
4	Simple Keyboard & Display Units
5	Z80 Peripherals- PIOs,
6	Midterm1
7	Z80 Peripherals- CTCs, Precision Timing Requiring Applications
8	Z80 Peripherals- SIOs, Serial Communication Applications
9	Z80 Interrupt Structures and Comparison With other MPUs
10	General Purpose I/O practices
11	Communicating with other Protocols
12	Midterm2
13	Project Development (Specs. to Documentation)
14	Simple Project Examples
15	Applications with Analog/Digital Converters
16	Industrial Applications

OUTCOMES				
S/N	At the end of the course, students will be able to:	Never	Few	Many
1	apply knowledge of mathematics, science, and engineering		X	
2	design and conduct experiments as well as to analyze and interpret data			X
3	design a system, component, or process to meet desired needs			X
4	function on multi-disciplinary teams			X
5	identify, formulate, and solve engineering problems			X
6	get an understanding of professional and ethical responsibility		X	
7	communicate effectively		X	
8	understand the broad education necessary to understand the impact of engineering solutions in a global and societal context			X
9	get a recognition of the need for, and an ability to engage in life-long learning			X
10	gain a knowledge of contemporary issues			X
11	use techniques, skills, and modern engineering tools necessary for engineering practice			X