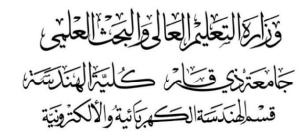Ministry of Higher Education
and Scinetific Research
Thi-Qar University
Collage of Engineering
Electrical and Electronic Engineering Dept

وزارة التعليم العالي والبحث العلمي
جامعة ذي قار كلية الهندسة
قسم الهندسة الكهربائية والألكترونية

العدد :

التاريخ :   /   /   ٢٠

Course number and name	EE 2510: Introduction to Microprocessors
Credits and contact hours	3 credits and 3 hours
Course coordinator	
Textbook	
Course Information	a. Prerequisites: EE 1500 Digital Logic and sufficient knowledge of programming (C or C++) b. Selective Elective
Topics to be covered	–Introduction to computer system, microprocessor evolution and architectures, numbering systems –Software model of 8086 microprocessor, physical addresses and assembly Language –Data transfer instructions, arithmetic instructions, shift and rotate instructions, flag control instruction (compare and jump instructions), string instructions –Variables, arrays and constants, MS-DOS functions and BIOS calls, program development using TASM. –Hardware architecture of 8086 microprocessor –I/O Ports, interfacing of I/O devices, memory interface of 8086 microprocessor –Building complete microprocessor based systems –Architecture and organization of microcontrollers –Instruction set of 8051 MCU, 8051 assembly language programming, interfacing of external memories, keyboard and LED Displays – Interfacing of actuators and transducers, timer/counter Operation