

1. Course Name:	
Computer Architecture	
2. Course Code:	
3. Semester / Year:	
Semester	
4. Description Preparation Date:	
28-11-2025	
5. Available Attendance Forms:	
Weekly (Theory: 2 hours, Practically: 2 hours)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Theory: 30 Hours Practically: 30 hours Total: 60 hours Total Units: 6	
7. Course administrator's name (mention all, if more than one name)	
Name: MSC. (Lec.) Nada Abdulkareem Hameed Marouf Email: nada.abdulkarim@muc.edu.iq	
8. Course Objectives	
Course Objectiv	1. To understand the instructions of 8086 microprocessor and how it works. 2. To design and implement instructions of 8086 microprocessors. 3. To equip students with the scientific and practical skills necessary to work with devices. 4. To teach students how to configure and program devices. 5. To teach students how to maintain devices, particularly from a software perspective. 6. To graduate students who are knowledgeable about some advanced topics in computer architecture like Pipeline processing (principle, performance measure, and instruction pipeline)
9. Teaching and Learning Strategies	
Strategy	1. Delivering theoretical & practical lectures on microprocessor curriculum. 2. Employing discussion and question-and-answer sessions in the classroom foster dialogue. 3. Assigning homework, program writing, and discussion to students 4. Writing reports on scientific topics related to microprocessors. 5. Daily assessment, weekly assessment, term assessment, objective question general knowledge questions, and practical exams.

6. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	Th.:2 Pr.: 2	Introduction to μ P	Introduction to microprocessor & microcomputer	Lect. & Lab.	Exam
2	Th.:2 Pr.: 2	Student know About architecture,	μ P architecture	Lect. & Lab.	Quiz
3	Th.:2 Pr.: 2	Types and functions	μ P IC pins	Lect. & Lab.	Homework
4	Th.:2 Pr.: 2	Types and function of Bus signal	Bus signal	Lect. & Lab.	Exam
5	Th.:2 Pr.: 2	Introduction to Inst. & addr. mode	Introduction to Instruction set M and addressing mode	Lect. & Lab.	Quiz
6	Th.:2 Pr.: 2	Know about data Transfer instruction	Data transfer instructions	Lect. & Lab.	Homework
7	Th.:2 Pr.: 2		Mid-term Exam	Lect. & Lab.	Exam
8	Th.:2H Pr.: 2H	Know about arithmetic Instruct.	Arithmetic instructions	Lect. & Lab.	Quiz
9	Th.:2H Pr.: 2H	Know about logical & branching inst.	Logical instructions, Branching instructions	Lect. & Lab.	Homework
10	Th.:2H Pr.: 2H	Review	Review instructions and Tutorial	Lect. & Lab.	Exam
11	Th.:2H Pr.: 2H	Definition Opcode & Machine cycle	Op-code and machine cycle	Lect. & Lab.	Quiz
12	Th.:2H Pr.: 2H	Draw Timing Diagram of inst.	Timing diagram of instructions	Lect. & Lab.	Homework
13	Th.:2H Pr.: 2H	Know Time delay Of code	Time delay of code	Lect. & Lab.	Exam
14	Th.:2H Pr.: 2H	Know about types & Archit. of memory	Types and architecture for memory	Lect. & Lab.	Quiz
15	Th.:2H Pr.: 2H	Preparatory	Preparatory week before the final exam	Lect. & Lab.	Homework
7. Course Evaluation					
The grade distribution is as follows: Assessment: Formative 40 marks, Monthly exam 10 marks Final exam: Theory 40 marks, Practical 10 marks					

8. Learning and Teaching Resources	
Required textbooks (curricular books any)	
Main references (sources)	Microprocessor Architecture, Programming and Applications with the 8086.
Recommended books and references (scientific journals, reports...)	1- W. Stalling, 2000, "Computer Architecture & Organization", 4 th editions, Prentice-Hall. 2. M. Murdocca, V. Heuring, 2000, "Principle of Computer Architecture", Prentice-Hall. 3. B. Brey, 2000, "The Intel Microprocessors, Architecture, Programming, and Interfacing", 5 th editions, Prentice-Hall.
Electronic References, Websites	http://www.mediafire.com/file/xnu0xhfknbp9bml/win_7.rar/file

Course Description Form