

1. Course Name:	<b>Micropocessor</b>
2. Course Code:	<b>MIET3102</b>
3. Semester / Year:	<b>Semester</b>
4. Description Preparation Date:	<b>17-11-2025</b>
5. Available Attendance Forms:	<b>Weekly (Theory: 2 hours, Practically: 2 hours)</b>
6. Number of Credit Hours (Total) / Number of Units (Total)	<b>Theory: 30 Hours</b> <b>Practically: 30 hours</b> <b>Total: 60 hours</b> <b>Total Units: 6</b>
7. Course administrator's name (mention all, if more than one name)	<b>Name: Dr. Adil Abbas Majeed</b> <b>Email: Adel.abas@muc.edu.iq</b>
8. Course Objectives	<p><b>Course Objectives</b></p> <ol style="list-style-type: none"> <li>1. To understand the 8085 microprocessor and how it works.</li> <li>2. To design and implement 8085 microprocessors.</li> <li>3. To equip students with the scientific and practical skills necessary to work with medical devices.</li> <li>4. To teach students how to configure and program medical devices.</li> <li>5. To teach students how to maintain medical devices, particularly from a software perspective.</li> <li>6. To graduate students who are knowledgeable about the various components of medical devices and can keep pace with advancements in their technologies.</li> </ol>
9. Teaching and Learning Strategies	<p><b>Strategy</b></p> <ol style="list-style-type: none"> <li>1. Delivering theoretical &amp; practical lectures on microprocessor curriculum.</li> <li>2. Employing discussion and question-and-answer sessions in the classroom to foster dialogue.</li> <li>3. Assigning homework, program writing, and discussion to students.</li> <li>4. Writing reports on scientific topics related to microprocessors.</li> <li>5. Daily assessment, weekly assessment, term assessment, objective questions, general knowledge questions, and practical exams.</li> </ol>
6. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	<b>Th.:2 Pr.: 2</b>	Introduction to $\mu$ P	Introduction to microprocessor and microcomputer	Lect. & Lab.	Exam
2	<b>Th.:2 Pr.: 2</b>	Student know About architecture, $\mu$ P architecture	$\mu$ P architecture	Lect. & Lab.	Quiz
3	<b>Th.:2 Pr.: 2</b>	Types and functions pins	$\mu$ P IC pins	Lect. & Lab.	Homework
4	<b>Th.:2 Pr.: 2</b>	Types and function of Bus signal	Bus signal	Lect. & Lab.	Exam
5	<b>Th.:2 Pr.: 2</b>	Introduction to Inst. & addr. mode	Introduction to Instruction set M and addressing mode	Lect. & Lab.	Quiz
6	<b>Th.:2 Pr.: 2</b>	Know about data Transfer instruction	Data transfer instructions	Lect. & Lab.	Homework
7	<b>Th.:2 Pr.: 2</b>		<b>Mid-term Exam</b>	Lect. & Lab.	Exam
8	Th.:2H Pr.: 3H	Know about arithmetic Instruct.	Arithmetic instructions	Lect. & Lab.	Quiz
9	Th.:2H Pr.: 3H	Know about logical & branching inst.	Logical instructions, Branching instructions	Lect. & Lab.	Homework
10	Th.:2H Pr.: 3H	Review	Review instructions and Tutorial	Lect. & Lab.	Exam
11	Th.:2H Pr.: 3H	Definition Opcode & Machine cycle	Op-code and machine cycle	Lect. & Lab.	Quiz
12	Th.:2H Pr.: 3H	Draw Timing Diagram of inst.	Timing diagram of instructions	Lect. & Lab.	Homework
13	Th.:2H Pr.: 3H	Know Time delay Of code	Time delay of code	Lect. & Lab.	Exam
14	Th.:2H Pr.: 3H	Know about types & Archit. of memory	Types and architecture for memory	Lect. & Lab.	Quiz
15	Th.:2H Pr.: 3H	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 8085 (6th Edition).
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	<a href="http://www.mediafire.com/file/xnu0xhfknbp9bml/8085_win_7.rar/file">http://www.mediafire.com/file/xnu0xhfknbp9bml/8085_win_7.rar/file</a>

## Course Description Form