

University of Technology
Computer Engineering Department
Academic Year 2023-2024
3st Year- First semester- All Branches



U124	Microprocessors	3 Hr/Week	3 Units
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Contents of syllabus	Hours
1- Introduction <ul style="list-style-type: none"> - Historical review - 8086 pin configuration - Operating modes: minimum and maximum - Clock generator 	4
2- 8086 software architecture <ul style="list-style-type: none"> - Bus interface unit - Execution unit - General purpose registers - Segment registers and memory segmentation - Special purpose registers(status register, SP, BP, SI, DI) - Generating a memory address 	4
3- 8086 Instruction set <ul style="list-style-type: none"> - Addressing modes - Instruction format - Instruction types 	8
4- 8086 Programming	8

5- Memory and I/O interfacing <ul style="list-style-type: none">- Read and write bus cycles- EPROM and RAM interfacing- I/O bus cycles- Memory mapped I/O- Isolated mapped I/O- I/O instructions and data transfers	6
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References:

TEXT BOOKS:

- 1- Walter A. Triebel & Avatar Singh: "The 8088/8086 Microprocessors".
- 2- Liu & Gibson: "The 8088/8086 Microprocessor"

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