

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



U124	Microprocessor Applications	2 Hr/Week	2 Units
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Contents of syllabus	Hours
<p>1- Basic programmable peripheral devices interfacing and programming:</p> <ul style="list-style-type: none"> - Programmable parallel ports (8255) - Serial communication (USART 8251A) - Programmable interval timer (8254) - Programmable interrupt controller (8259A) - Programmable DMA controller (8237) 	14
<p>2- Microprocessor applications:</p> <ul style="list-style-type: none"> - Data acquisition system (ADC-0808, DAC-0800, Multiplexers) - Temperature control - Traffic light control - Stepper motor control - DC motor control - Interfacing with sensors and transducers - Key board interface 	10
<p>3- Bus interface:</p> <ul style="list-style-type: none"> - The ISA bus - The PIC bus - The LPT bus - The serial COM ports - The USB bus 	6

TEXT BOOKS:

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

2- Liu & Gibson: "The 8088/8086 Microprocessor"

