

OET004 – MICROPROCESSORS/MICROCONTROLLERS

Credit Hours: 3-4 Semester Hours
Prerequisite: Digital Electronics (OET002)
Related TAG: Electrical Engineering Technology
General Course Description: This course includes microprocessor/microcontroller architecture, instruction sets, software development, interrupt handling, memory, interfacing techniques, and hardware used in control applications designed with microprocessor/ microcontrollers. Includes hands-on labs.
Student learning outcomes marked with an asterisk (*) are essential and must be met.
Students will be able to:
1. Explain microprocessor architecture.*
2. Utilize assembly language programming to develop code for a microprocessor.*
3. Explain and utilize bus timing diagrams.*
4. Demonstrate an understanding of and applications for bus structures.*
5. Utilize memory technologies and interfacing in microprocessors.*
6. Implement input/output (I/O) systems, I/O interface requirements, and interrupt based I/O.*
7. Utilize direct memory access (DMA) in microprocessor applications.*
8. Utilize microprocessors/microcontrollers in a variety of applications.*

**ELECTRICAL ENGINEERING TECHNOLOGY TAG:
MICROPROCESSORS/MICROCONTROLLERS TAG COURSE
FACULTY PARTICIPANTS**

November 2016 – April 2017

Name	Institution
Rob Speckert (Review/Revision Panel Lead)	Miami University
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