# **Michigan Technological University**

## **Minor in Electrical Engineering**

Program Code: EEEM, Academic Year 2019-20

Department of Electrical and Computer Engineering

**Total Credits Required: 18** 

## **Required Courses: 8 credits**

Course	Credits
EE 2112 Electric Circuits II and Lab (4)	
EE 2174 Digital Logic and Lab (4)	

## Elective Courses: 10 credits minimum from a combination of EE Core and EE Focus course lists

## EE Core Course List: choose 3 to 7 credits

Course	Credits
EE 3010 Circuits and Instrumentation (3)	
EE 3120 Electric Energy Systems (3)	
EE 3131 Electroincs (4)	
EE 3140 Electromagnetics (3)	
EE 3160 Signals and Systems (3)	
EE 3171 Microcontroller Applications (4)	
EE 3180 Intro to Probability & Random Signal Analysis (3)	

## EE Focus Course List: choose 3 to 7 additional credits

Course	Credits
EE 3190 Optical Imaging and Sensing (3)	
EE 3261 Control Systems (3)	
EE 3290 Photonic Material & Devices (4)	
EE 3373 Intro to Programmable Controllers (3)	
EE 4250 Communication Theory (3)	
Any EE course Between EE4200 - EE4499	

#### This minor is not open to students majoring in Computer Engineering

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C: EE2112 (EE3010 or EE2111) (MA3520 or MA3521 or MA3530, MA3560)), EE2174 (EET2241 or CS1111 or CS1121 or CS1131), EE3120 ((EE3010 or EE2112C)), EE3131 (EE2112 or EE3010), EE3140 ((PH2200 and MA3160 and (EE3010 or EE2112)), EE3160 ((EE2112 and (MA2320 or MA2321 or MA2330) and MA3520 or MA3531 or MA3530 or MA3560)) EE3171 ((EET2241 or CS1121 or CS1111) and (EE2174)), EE3180 (EE3160), EE3190 (MA3500 or MA3521 or MA3530 or MA3560), EE4250 (EE3131 and EE3180), EE3261 (EE3160), EE4219 (EE2112 or EE3010), EE4220 (EE4219C), EE3290 (EE2190 or EE3090 or EE3140 or PH2400).