Michigan Technological University
Minor in Electrical Engineering
Program Code EEEM, Academic Year 2026-2027
Department of Electrical and Computer Engineering
Minimum Credits Required: 18

This minor is not open to students majoring in Computer Engineering or Robotics Engineering

Required Courses: 8 Credits

- EE 2112 Electric Circuits II and Lab (4) *Prereqs: MA3520 or MA3521 or MA3530 or MA3560*
- EE 2174 Digital Logic and Lab (4) *Prereqs: CS1111 or CS1121 or CS1131*

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

- EE 3120 Electric Energy Systems (3) *Prereqs: EE3010 or EE2112*
- EE 3131 Electronics (4) *Prereqs: EE2112 or EE3010*
- EE 3140 Electromagnetics (3) *Prereqs: PH2200 and MA3160 and (EE2110 or EE2112)*
- EE 3160 Signals and Systems (3) *Prereqs: (EE3010 or EE2112) and (MA2320 or MA2321 or MA2330) and (MA3520 or MA3521 or MA3530 or MA3560)*
- EE 3180 Probability Signal Analysis (3) *Prereqs: EE3160*

EE Focus Course List: choose 3 to 7 additional credits

- EE 2180 Introduction to Robotics (3) *Prereqs: (EE3010(C) or EE2112(C)) and (MA2320(C) or MA2321(C) or MA2330(C))*
  - **or** EE 2190 Intro to Photonics (3) *Prereqs: MA3521 and PH2200* **or**
  - **or** EE 2230 Printed Circuit Seminar Series (3) *Prereqs: CH1150 and CH1151*
    - **and** EE 2231 Printed Circuit Fabrication (1) *Prereqs: none*
- EE 3190 Optical Imaging and Sensing (3) *Prereqs: MA3520 or MA3521 or MA3530 or MA3560*
- EE 3261 Control Systems (3) *Prereqs: EE3160*
- EE 3290 Photonic Material Devices and Apps (4) *Prereqs: EE3140 or PH2400 or EE2190*
- EE 3373 Intro to Programmable Controllers (3) *Prereqs: EE2112 or EE3010*
- EE 4250 Modern Communication Systems (3) *Prereqs: EE3160 and EE3131 and EE3180*
- Any EE course Between EE4200 - EE4699