

## Michigan Technological University

### Minor in Biomedical Engineering

Program Code EBEM, Academic Year 2024-25

Department of Biomedical Engineering

Total Credits Required: 18

This minor is not open to students majoring in Electrical Engineering with a Biomedical Applications concentration

#### Required Course: 9 credits

- BE 2400 Cellular and Molecular Biology (3) *Prereqs: CH1150 and MA1121 or MA1160 or MA1161*
- BE 2700 Biomedical Signals & Systems (3) *Prereqs: CH1150, MA2160, ENG1102 and PH2100*
- BE 4850 Tissue Mechanics (3) *Prereqs: BE3350*
  - or, BE 4755 Medical Devices *Prereqs: none*

#### Elective Courses, 9 credits minimum

- BE 2110 Statistical Methods for Biomedical Engineering (3) *Prereq: MA2160*
- BE 3350 Human Biomechanics (3) *Prereqs: BE3300 or MEEM2110*
- BE 3400 Laboratory Techniques for BME (2) *Prereqs: BE2800 or MSE2100*
- BE 3700 Biomedical Instrumentation (3) *Prereqs: BE2700, EE3010*
- BE 3701 Biomedical Instrumentation Lab (1) *Prereqs: none*
- BE 3800 Biomaterials II (3) *Prereqs: BE2800 or MSE2100*
- BE 4410 Medical Imaging (3) *Prereqs: BE3700 and BE3701*
- BE4670 Micro- and Nanotechnology for Biomedical Applications (3) *Prereqs: PH2100 or EE2110 or EE3010*