Follow this plan to avoid time conflicts between required classes.

### Bachelor of Science – Electrical Engineering Biomedical Applications Concentration

#### 2023-2024

**Prerequisites:**
- Calculus I (MA1160/61)
- Calculus II (MA2160)
- Calculus III (MA3160)
- Linear Algebra (MA3212)
- Introduction to Biomedical Engineering (ENT1960)
- Microcontroller Applications for Biomedical Devices (ENT2950)

**Semester 1 - Fall**
- Calculus I (MA1160)
- Analytical Mechanics (PH1100)
- Unit 1: Required Courses (9 credits)

**Semester 2 - Spring**
- Calculus II (MA2160)
- Physics I (PH1200)
- Mechanics Elective (2-4 credits)
- Electrical Circuits I (EE2111)
- Calculus III (MA3160)
- Pre-registration for required courses

**Semester 3 - Fall**
- Calculus III (MA3160)
- Statics (PH2200)
- Physics II (PH1200)
- Mechanics Elective (2-4 credits)
- Electrical Circuits I (EE2111)

**Semester 4 - Spring**
- Calculus IV (MA4160)
- Physics III (PH2200)
- Mechanics Elective (2-4 credits)
- Electrical Circuits II (EE2121)
- Pre-registration for required courses

**Semester 5 - Fall**
- Calculus V (MA4160)
- Mechanics Elective (2-4 credits)
- Electrical Engineering I (EE3160)
- Pre-registration for required courses

**Semester 6 - Spring**
- Calculus VI (MA4160)
- Mechanics Elective (2-4 credits)
- Electrical Engineering II (EE3160)
- Pre-registration for required courses

**Semester 7 - Fall**
- Calculus VII (MA4160)
- Mechanics Elective (2-4 credits)
- Electrical Engineering III (EE3160)
- Pre-registration for required courses

**Semester 8 - Spring**
- Calculus VIII (MA4160)
- Mechanics Elective (2-4 credits)
- Electrical Engineering IV (EE3160)
- Pre-registration for required courses

**Total Credits:** 128

**Biomechanics Focus:** Follow pink path
- Biomedical Engineering (BEA) Focus: Fall - BE3300, BE3800, BE4755; Spring - BE2800, BE3350

**Biomaterials Focus:** Follow blue path
- Biomedical Engineering (BEA) Focus: Fall - BE3800, BE4755; Spring - BE2800, BE3350

**Note:**
- May use BE4770 plus one credit of ‘free elective’ in place of EE3171.
- Study Abroad info: https://www.mtu.edu/student-affairs/study-abroad-experiences/program/
- Attend Career Events early on: Carefully plan for a co-op semester. https://www.mtu.edu/career/students/
- Undergraduate advisor: EERC 131: Walk in or email Kailee Laplander klaplan@mtu.edu