Follow this plan to avoid time conflicts between required classes.

**SAMPLE PLAN**

**Bachelor of Science – Robotics Engineering 2023-2024**

### Year 1

**Fall**
- **Co-hort courses**
  - ENG1101 (3) Eng. Analysis & Prob. Solving
  - CH1150/51 (4) &/or CH153 (1) Univ. Chem I
  - PH2100 ENG1102 (3) Eng. Model. & Design
  - SAT2711 (3) Linux Fundamentals
  - MA1160 (4) or MA1161 (5) Calculus I
  - MA2160 (4) Calculus II

**Spring**
- **Co-hort courses**
  - CS1111 (3) Intro to Programming In C / C++
  - CH1150/51 (4) &/or CH153 (1) Univ. Chem I
  - ENG1102 (3) Eng. Model. & Design
  - ENG2120 (4) Digital Logic & Lab
  - CS1111 (C) CS1121 (optional)
  - MA2160 (4) Calculus II
  - MA2320/21 (C) MA3160 (C)
  - PH2100 ENG1102 (3) Eng. Model. & Design

**Notes:**
- Take CH1100 first, if not well-prepared for University Chem.
- CH1150/51 preferred with CH153.
- MA2320 & MA3520, full semester courses, may replace MA2321 & MA3521.

**Additional:**
- ENGR1101 (3) Comp. Sci. I
- MA1160/61 required for MA2320/3520
- PH2100 (3) Univ. Physics I

### Year 2

**Fall**
- **Enterprise Design Option:**
  - EE3010 (3) Signals & Sys OR MEEM3750 (4) Design Fund.
  - MA2160/61 Co-reg.
  - EE3010 MA2320/21 MA3520/21
  - MA2320/21 MA3520/21
  - MA2160/61

**Spring**
- **Enterprise Design Option:**
  - EE3261 (3) Control Systems
  - EE2174 (4) or EET4141 (4) Microcontrollers
  - PH2200 (3) Univ. Physics 2

**Optional:**
- EE3160 (3) Robot Operating Systems
- CH2100/21 or CH2141

**Notes:**
- ENGR1101 (3) Comp. Sci. I
- MA1160/61 required for MA2320/3520
- PH2100 (3) Univ. Physics I

### Year 3

**Fall**
- **Enterprise Design Option:**
  - EE3901 (2) Design Fund.
  - MA3521 (2) Accel Diff Eq

**Spring**
- **Enterprise Design Option:**
  - EE4235 (3) Sensing & Processing in Robotic Apps
  - ENT3950 (1)

**Optional:**
- EE3171 (4) or EE3910 (2)

### Year 4

**Fall**
- **Enterprise Design Option:**
  - EE3901 & EE3280 & (EE3261 or MEEM3750)

**Spring**
- **Enterprise Design Option:**
  - EE4901 (2) Sr. Design Sem. 1

**Optional:**
- ENGR3950 (1)

**Notes:**
- MA3521 recommended
- Eng. Modeling
- Calculus
- Strongly recommended
- Math & Science
- Elective

### Total Credits

- Total 122-125 cr.
- plus 3 units curricular activities

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**Undergraduate Advisor:**
- Kailee Laplander
- EERC 131
- klaplan@mtu.edu

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**Study Abroad 101:**
- https://www.mtu.edu/student-affairs/study-away-and-abroad-experiences/program/

**Attend Career Services events early on:**
- Semester 6 is good time to co-op.
- 220 Admin Building