EngineeringPlus Emphasis 2021/22

**Year 1**

**Fall**
- MA1160/1161 Calculus I (4/5 credits)
- PH1100 Physics Lab I (1 credit)
- CH1150 Chemistry (3 credits)
- ENG1101 or (ENG1001 & ENG1100) Eng. Analysis & Prob. Solving (3 credits)

**Spring**
- MA1160 Calculus II (4 credits)
- PH2100 Physics II Lecture I (3 credits)
- ENG1102 Eng. Modeling & Design (3 credits)
- CH1151 Chemistry Lab (1 credit)

**Year 2**

**Fall**
- MA2160 Multivariable Calc (4 credits)
- MA3220 Linear Algebra (2 credits)
- MSE2100 Intro to Materials Strength Mat'l (4 credits)
- ENG3303 or CEE3301 (3 credits)

**Spring**
- MA3710 Statistics (3 credits)
- ENG2120 Statics-Strength Mat'l (4 credits)
- EE3010 Circuits & Instrumentation (3 credits)
- UN1025 or ENG1025 Jr. Stdg. (3 credits)

**Year 3**

**Fall**
- MA2320 Linear Algebra (2 credits)
- MA3710 Statistics (3 credits)
- ENG4300 Project Management (3 credits)
- ENG4905 Sr. Design Ready (3 credits)

**Spring**
- MET4300 (3 credits)
- MET4510 (3 credits)
- ENG4515 or CEE4506 (3 credits)
- ENG4905 Sr. Design (3 credits)

**Year 4**

**Fall**
- ENG4515 or CEE4506 (3 credits)
- ENG4300 (3 credits)
- MSE2100 (3 credits)
- UN1015 UN1025 Jr. Stdg. (3 credits)

**Spring**
- MET4300 (3 credits)
- ENG4515 or CEE4506 (3 credits)
- ENG4905 Sr. Design Ready (3 credits)
- ENG4905 Sr. Design (3 credits)

---

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes. See back of academic plan for more information on requirements for elective courses.
BSE EngineeringPlus Emphasis 2021-22
(minimum of 125 credits)
Academic questions: E-mail efadvise@mtu.edu

1 Senior Design Prerequisite courses:
ENG1101, ENG1102, ENG2120, ENG3200, ENG3830 (C), and EE3010.

2 General Education Requirements (24 credits + 3 PE units):

I. Core Courses (12 credits)
   ___ UN1015 Composition
   ___ UN1025 Global Issues or 3000+ Modern Language
   ___ Critical/Creative Think List
   ___ Social Resp./Ethical Reason List

II. HASS Courses Requirements (12 credits)
(www.admin.mtu.edu/em/documents/HASS Distribution List.pdf)
   - 6 credits upper level (3000-4999)
   - 3 credits from each listed below
     ___ Communication/Composition
     ___ Humanities/Fine Arts List (HU/FA)**
     ___ Social & Behavioral Science List (EC/PSY/SS)**
     ___ 3 credits from any list**

* EC3400 is required by the degree, and may NOT be counted as a Social Resp./Ethical Reason or HASS course.

III. Co-curricular activities (3 units)
In the co-curricular requirement, the three semester units will be physical education activities. These units are required for graduation, but are not included in the calculation of the GPA, nor in the overall degree-credit requirement. Note: most physical education activities will last for 7½ weeks or ½ semester. A student would need six of these ½-semester units to fulfill the 3-semester unit co-curricular requirement.

   PE___________ PE___________ PE_________
   PE___________ PE___________ PE_________

3 Quality Control Elective (select 3 credits):
   ___ MET4510 ___ MEEM4650 ___ OSM4650

4 Math/Science Elective (select 4 credits):
   ___________ ___________ ___________ ___________

5 Technical Electives (12 credits):
Select 12 credits engineering credits at the 3000+ level in a coherent plan of study that is approved by the Academic Advisor for the Bachelor of Science in Engineering program, Department Chair of Engineering Fundamentals and Academic Dean for the College of Engineering. 6 credits must be 4000+ level.

   ___________ ___________ ___________ ___________
   ___________ ___________ ___________ ___________

6 Directed Electives (15 credits):
Select 15 credits in a coherent plan of study such as partial fulfillment of a university approved minor, or a self-defined program with the advice of the BSE Academic Advisor.

   ___________ ___________ ___________ ___________
   ___________ ___________ ___________ ___________