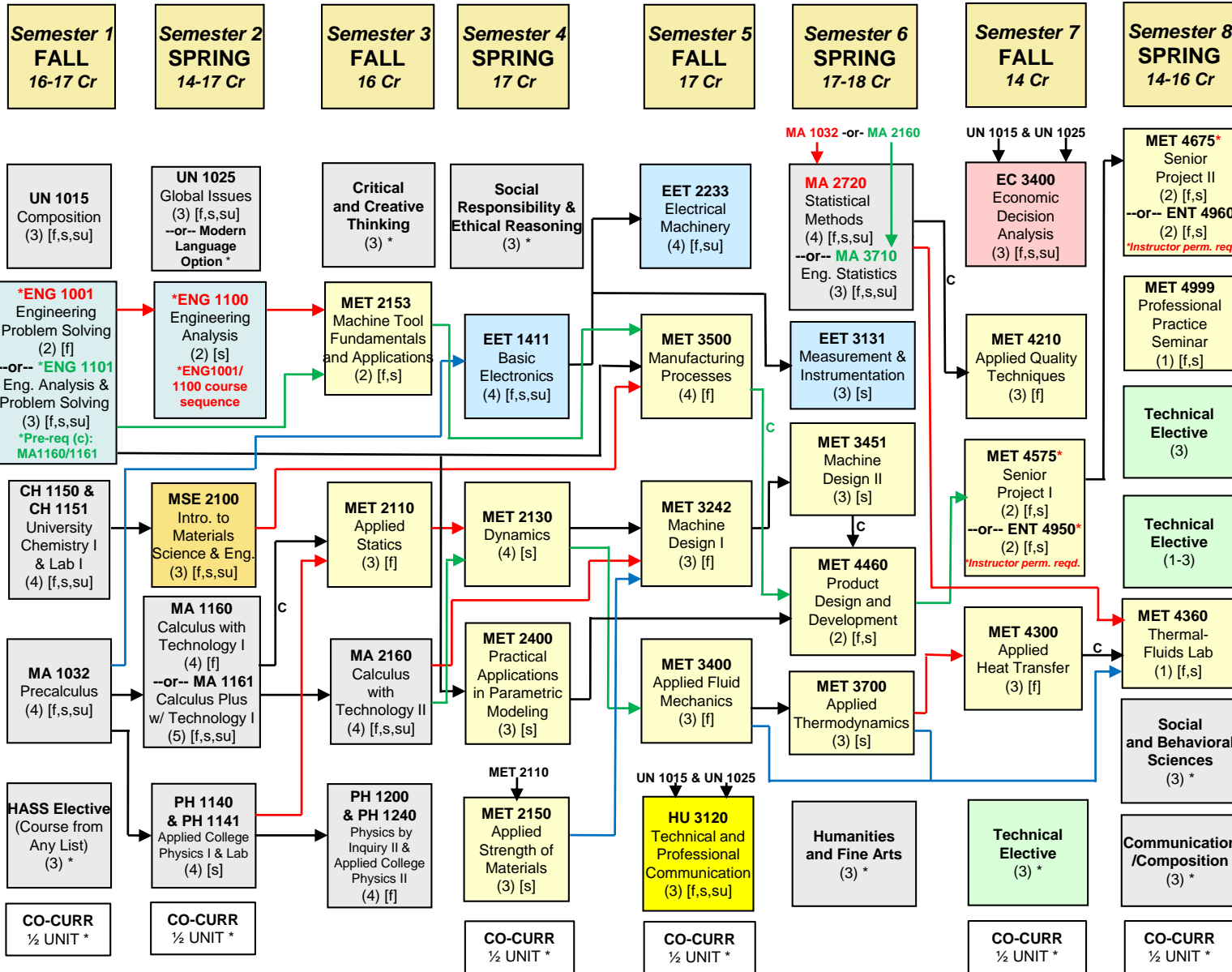


# Bachelor of Science - Mechanical Engineering Technology

Academic Year 2021-22 – Recommended Course Sequence

128  
Total Credits



- Technical Electives**  
(Prerequisite/s)  
(Choose 7-9 credits)
- Computer-Aided Eng. Focus:**  
MET 4355 - 3 [s]  
Industrial Systems Simulation
- MET 4550 - 3 (MET 2153 & MET 2400) [s]  
Computer Aided Manufacturing
- MET 4660 - 3 (MET 2400 & MET 3242 (C)) [f]  
CAE and FEA Methods
- Fluids & Power Systems Focus:**  
MET 4350 - 3 (MET 4300) [s]  
Principles and Application of Heating, Ventilating, and Air Conditioning Systems
- MET 4377 - 3 [s]  
Applied Fluid Power
- MET 4390 - 3 (MET 3700 & MET 4360 (C)) [f]  
Internal Combustion Engines
- Manufacturing Focus:**  
MET 4510 - 3 [s]  
Lean Manufacturing and Production Planning
- MET 4585 - 3 [f]  
Facilities Layout & Safety Design
- MET 4780 - 3 (MET 3500) [s]  
Advanced Manufacturing
- Other Technical Electives:**  
EET 3373 - 3 (EET 1411) [f,su]  
Introduction to Prog. Controllers
- ENT XXXX - variable 1-2  
Enterprise Project Work  
(except 3959, 3967, 4950, 4960)
- MET 4996 - 1-3 \*\*  
Special Topics in Mechanical Engineering Technology
- MET 4997 - 1-3 \*\*  
Independent Study in Mechanical Engineering Technology
- MET 4998 - 1-6 \*\*  
Undergraduate Research in Mechanical Engineering Technology
- UN 3002 - 1-2, may be repeated [f,s,su]  
Undergraduate Cooperative Education I
- \*\* On Demand

\*Spatial Visualization Test required to enroll in ENG 1001 or ENG 1101)

→ Prerequisite (Course must be completed prior to enrollment)

→ C → Concurrent Prerequisite (A prerequisite course that may be taken concurrently)

( ) Course Credits

[ ] Semester Offered

**\* See Notes on Back**

May 2021

1. **General Education Requirements**: 24 total credits. Required courses: UN 1015-Composition (3 credits); UN 1025-Global Issues (3 credits); Critical and Creative Thinking (3 credits); Social Responsibility & Ethical Reasoning (3 credits); and 12 HASS credits. Approved lists are available in EERC 426 and linked on the Department of Manufacturing and Mechanical Engineering Technology's "Advising" web page. <https://www.mtu.edu/registrar/pdfs/core-and-hass-list-21-22.pdf>
2. **UN 1025 Global Issues Language Option**: 3 credits of 3000-level or higher modern language may be substituted directly for UN 1025. **Any students with previous language experience in Spanish, French, German, or Mandarin must take the Modern Language Online Placement Test.**
3. **HASS (Humanities, Arts, & Social Sciences)**: 12 total credits that include a minimum of 3 credits each in: Communication/Composition, Humanities/Fine Arts, and Social & Behavioral Sciences. Approved lists are available in EERC 426 and are linked on the Department of Manufacturing and Mechanical Engineering Technology's "Advising" web page. <https://www.mtu.edu/registrar/pdfs/core-and-hass-list-21-22.pdf> **Six (6) credits must be 3000 level or higher (does not include HU 3120). HU 3120 is not a HASS course for MET students, but still is a degree requirement.** No more than 3 credits may be used from the HASS Restricted List. All 3000-level or higher HASS courses require UN 1015 and UN 1025 as prerequisites.
4. **Science Elective (STEM)**: <https://www.mtu.edu/registrar/pdfs/stem-requirements-21-22.pdf>
5. **Math**: Math placement is based on ACT/SAT math score. Students have the option to take the ALEKS placement test in place of the ACT/SAT placement. For more information, see: <https://www.mtu.edu/math/undergraduate/placement/> **Note**: MA 1120 (4 credits) fulfills the requirement for MA 1032; MA 1121 (4 credits) fulfills the requirement for MA 1160/1161.
6. **Engineering Fundamentals**: ENG 1001 (2 credits) plus ENG 1100 (2 credits) is equivalent to ENG 1101 (3 credits). The Spatial Visualization test is required to enroll in ENG 1001 or ENG 1101. ENG 1003 is required concurrently with ENG 1001 or ENG 1101 if the Spatial Visualization test is not passed. MA 1160/1161 is a concurrent pre-requisite for ENG 1101, and MA 1031 or MA 1032 are concurrent pre-requisites for ENG 1001.
7. **Free Electives**: Any Michigan Tech course(s) or approved transfer course(s) that are 1000-level or above, and are not duplicated or equivalent courses.
8. **Co-curricular Activities**: Mainly physical education courses with some additions. Three units (or six half units) are required for graduation. These units will be included as earned hours and may be used to determine full-time enrollment status. These are in addition to the total credits required for the degree. A co-curricular list is available in EERC 423 and is linked on the Department of Manufacturing and Mechanical Engineering Technology's "Advising" web page. These units are graded pass/fail and are not included in credit hours used for calculation of any grade point averages (cumulative or departmental). <https://www.mtu.edu/registrar/pdfs/co-curricular-courses-21-22.pdf>
9. **Pre-requisite** courses are noted by a plain arrow. The pre-requisite course must be successfully completed **prior** to taking the subsequent course.
10. **Concurrent Pre-requisites** are noted by a 'C' by the arrow and may be taken at the same time, although it is not necessary to take these courses together if the pre-requisite course is completed first.
11. **Co-requisite** courses are courses that **must** be taken together in the same semester.
12. **Colored arrows** are used to clarify the sequence of courses.
13. **Transfer, Advanced Placement, or Study Abroad Courses** are not included in credit hours used for GPA calculations. Transfer credit is awarded for Michigan Tech equivalent course work only if a grade of 'C' or better (2.00/4.00) or equivalent is earned at a transfer institution. Study abroad credit will be awarded by International Programs and Services based on passing a course according to equivalent international standards. Advanced Placement credit is awarded according to published AP Exam score standards.

**This flow chart is not an official list of degree requirements. Adjustments may be required due to curriculum changes.**

Advising web page: <https://www.mtu.edu/mmet/undergraduate/advising/>