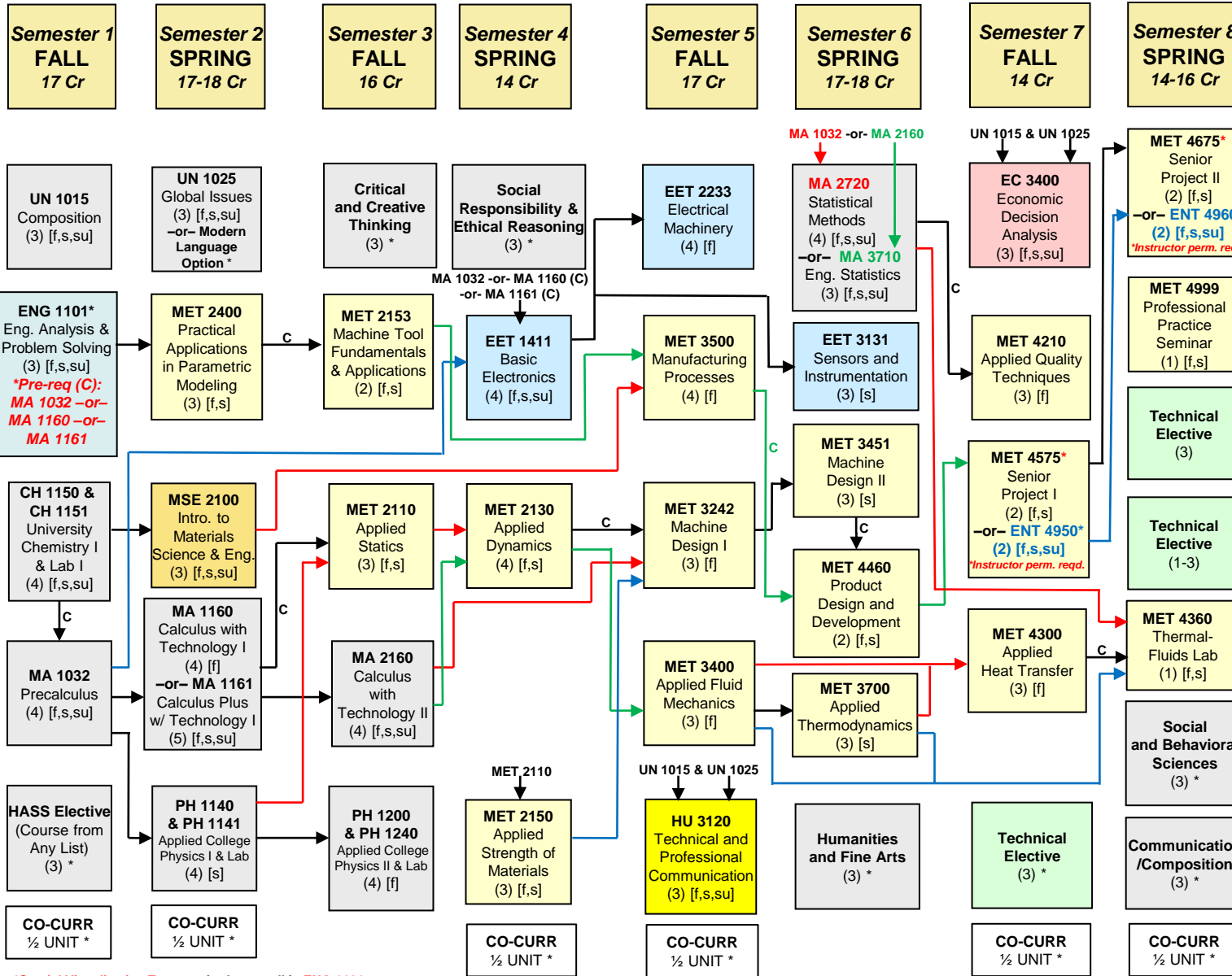


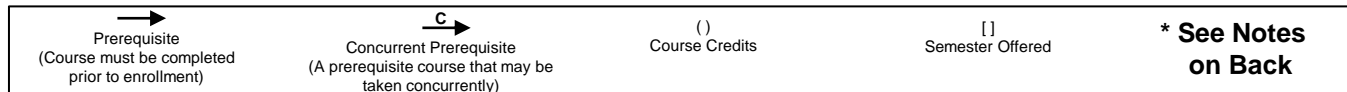
Bachelor of Science - Mechanical Engineering Technology

Academic Year 2024-25 – Recommended Course Sequence

128
Total Credits



*Spatial Visualization Test required to enroll in ENG 1101



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 4377 - 3 (MET 3400) [f]
Applied Fluid Power
MET 4378 - 3 (MET 4377) [s]
Advanced Hydraulics: Electro-hydraulic Components and Systems
MET 4390 - 3 (MET 4300 or (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
EET 4311 - 3 (EET 1411) & (MET 2110 & MET 2130) [f,su]
Control Systems
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
OSM 4350 - 3 (OSM 3200 or ENG 4300 or OSM 4300) [s]
Advanced Project Management
UN 3002 - 1-2, may be repeated [f,s,su]
Undergraduate Cooperative Education I

** On Demand

March 2024

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-24-25.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-24-25.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. **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.
5. **Engineering Fundamentals**: The Spatial Visualization test is required to enroll in ENG 1101. ENG 1003 is required concurrently with ENG 1101 if the Spatial Visualization test is not passed. **MA 1032 or MA 1160 or MA1161** is a concurrent pre-requisite for ENG 1101.
6. **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.
7. **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 426 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-24-25.pdf>
8. **Pre-requisite** courses are noted by a plain arrow. The pre-requisite course must be successfully completed **prior** to taking the subsequent course.
9. **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.
10. **Co-requisite** courses are courses that must be taken together in the same semester.
11. **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/>

March 2024