



# **Mechanical Engineering**

**First Year Student  
Advising Meeting  
October 18<sup>th</sup>, 2021**





# ME Academic Advisors

Ryan Towles

[ratowles@mtu.edu](mailto:ratowles@mtu.edu)

Tricia Stein

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# Advising Office Hours

8:00 am – 5:00 pm (Mon-Fri)

204A/204B ME-EM (inside ELC, 203)

906.487.2564

**walk-in** or by phone/email

- Know/send your M number
- Do not email both advisors separately, copy us both.
  - Or use meadvise@mtu.edu
- Use your Michigan Tech email account.

# ME Advising Web Page


<http://www.mtu.edu/mechanical/undergraduate/advising/>

Lot's of FAQs, links, forms...

A good first stop for advising information, see an advisor with questions.



# Agenda

- Advising
  - Student Success
  - Mid-Term Progress
  - Registration/Scheduling
  - Academic Planning
- 



# How advisors help students realize outcomes and goals

- Confirm that degree program aligns with student's academic interests and abilities, or assist with exploration of majors
- Create an educational plan that fulfills the academic requirements
- Select appropriate classes to satisfy your evolving goals and needs
- Learn the benefits of internships, co-ops, study abroad, etc.
- Explore academic options: Enterprise program, dual degrees, undergraduate research, minors, graduate study, etc.
- Identify and locate resources and services
- Interpret university and departmental requirements, policies, regulations, and procedures
- Development of decision-making skills, self-awareness, and self-direction
- Clarification and evaluation of progress toward academic and life goals

# Student Responsibilities (Advising Syllabus)

- Take responsibility for academic planning
- Understand degree requirements
- Follow academic procedures and policies
- Communicate with your advisor: read all advising correspondence, **utilize advising every semester**
- Attend advising meetings prepared, take notes
- Apply advising recommendations in order to achieve your academic plan
- Seek assistance from university resources.
- Contact your advisor promptly when you have questions or concerns
- Problem-solve to revise and achieve your academic plan

## Academic Advising Checklist

### Orientation Week *preparing for your first semester*

- ☐ Explore Campus Resources and visit these websites
- ☐ Your department and advisor
- ☐ Undergraduate Catalog - [www.mtu.edu/catalog/](http://www.mtu.edu/catalog/)
- ☐ Dean of Students - [www.mtu.edu/deanofstudents/](http://www.mtu.edu/deanofstudents/)
- ☐ Registrar - [www.mtu.edu/registrar/](http://www.mtu.edu/registrar/)
- ☐ Advising - [www.mtu.edu/registrar/students/advising/](http://www.mtu.edu/registrar/students/advising/)
- ☐ Library - [www.mtu.edu/library/](http://www.mtu.edu/library/) - take a library tour
- ☐ Wellness and Counseling - [www.mtu.edu/counseling/](http://www.mtu.edu/counseling/)

### Year 1 *transitioning and adjusting to college life*

- ☐ Attend first year advising meeting with your major advisor
- ☐ What to do if you are unsure about your major, meet with
  - General sciences/arts undeclared advisor: [www.mtu.edu/sciences-arts/undergraduate/gsa/](http://www.mtu.edu/sciences-arts/undergraduate/gsa/) or
  - General/undecided engineering advisor: [www.mtu.edu/ef/degree/advising/](http://www.mtu.edu/ef/degree/advising/)
- ☐ Review major requirements
- ☐ Run interactive audit each semester after registration - [www.mymichigantech.mtu.edu](http://www.mymichigantech.mtu.edu)
- ☐ Review Academic Policies and Academic Integrity - [www.mtu.edu/deanofstudents/](http://www.mtu.edu/deanofstudents/)
- ☐ Review University Student Learning Goals and your major's learning goals
- ☐ [www.mtu.edu/learning-goals](http://www.mtu.edu/learning-goals)
- ☐ Visit Career Services - [www.mtu.edu/career/](http://www.mtu.edu/career/)
- ☐ Go to Career Cruising 'Explore my Interests' - [www.mtu.edu/career/students/advising/career-cruising/](http://www.mtu.edu/career/students/advising/career-cruising/)
- ☐ Create a resume and attend career fairs
- ☐ Begin to explore Pavlis Honors College, internship, co-op, research, study abroad, minors
- ☐ Learn about campus activities and student organizations
- ☐ [www.involvement.mtu.edu/organizations](http://www.involvement.mtu.edu/organizations)



# What you should do?

- **Keep a Personal Academic File**
  - ▣ **Copies of documents/correspondence from academic advisors, student records, Degree Services, Transfer Services, etc.**
    - **Copies of transcripts**
    - **Flowchart for your major (showing progress marked by advisor)**
  - ▣ **Recommendation letters**
  - ▣ **Academic Plan**
  - ▣ **Resume/Cover Letter**

***Your academic advisor is here to assist you in your journey through college. Prepare for advising in advance and make your advising time together count.***

# Time Management

- How has the semester been going?
- How many hours a week have you been studying? At least 2-3 hour for each hour in class?
- 15 credits = ~15 class hours + 30 study hours: 45 hours minimum per week
- Work ahead and keep track of your time!
  - ▣ Semester plan
  - ▣ Weekly plan
  - ▣ Time log/Progress Report

# Time Log

- How are you spending your time?
- Keep log for two weeks. Have you tried?
- Analyze your results:
  - Are you sleeping 7-8 hours per night?
    - Trying to 'catch up' on sleep on the weekend stresses your system – try to wake up/go to sleep within the same hour each day
  - Are you getting enough exercise?
  - Are you attending ALL of your classes?
  - Are you studying 30-45 hours per week?
- Are you surprised by the results of this self-study?

# Be a Professional Student

- Come to campus and stay on campus.
  - ▣ Treat your studies like a full-time job.
  - ▣ Have purpose to your study locations and time periods.
  - ▣ Go to class, every class.
  
- Be detail-oriented
  - ▣ Check your Michigan Tech email at least daily.
  - ▣ Pay attention to communication:
    - Emails – especially from instructors, advisors, Wahtera Center for Student Success, Dean of Students, etc.
    - Canvas – **VERY** important for your classes.
    - MyMichiganTech/BanWeb – Checking schedule, changing classes, checking grades, current GPA, changing curricula, etc.

# Campus Resources – use them!

- Faculty (office hours or by appt)
- Learning Centers (appts where possible)
- Upper class students (for some things)
- Resident assistants
- Waino Wahtera Center for Student Success
  - ▢ Academic Success Coaching
- Counseling Services
- Career Services
  - ▢ Walk-in Learning Center
- Academic Advisors

# Mid-semester grades

- Available October 18<sup>th</sup> after 5:00 p.m.
- Check on BanWeb
- Grades are “Satisfactory” (SA) or “Unsatisfactory” (UN)
  - SA = ‘C’ or better progress
  - UN = lower than ‘C’ progress (‘CD’, ‘D’, ‘F’)
- **You should be able to estimate your current grades more precisely using your syllabus for each course.**
- **You will be contacted by the Center for Student Success and academic advisors if you receive two or more ‘UN’s**
  - **Academic coaching and assistance available through this center**
  - **We’ll also contact you with one ‘UN’ in math, PH 2100, or ENG 1101/1102.**

# Academic Probation

You are placed on academic probation if your:

- Cumulative GPA is below 2.00, OR
- Most recent semester GPA is below 2.00, OR
- Departmental GPA is below 2.00, based on at least 16 credits.

You are removed from academic probation when your

- Cumulative GPA is 2.00 or higher, AND
- Most recent semester GPA is 2.00 or higher, AND
- Departmental GPA is 2.00 or higher.

**If you are on academic probation after this semester, you must meet with an academic advisor regarding scheduling and with the Center for Student Success. Be proactive about this over break!**

# Dropping a class

Last day to drop full fall semester classes with a 'W' is Friday, November 5<sup>th</sup> by 5:00 p.m.- No Refunds

Track B classes (classes that begin on October 18<sup>th</sup>) have different drop deadlines, see an advisor.

All drops must be requested by emailing [schedule@mtu.edu](mailto:schedule@mtu.edu) Drops cannot be done through BanWeb.

**Orange first-year drop slip – must be signed by instructor and advisor (or email instead). Don't wait until the last minute.**

No late drops granted just to avoid poor grades.



# Repeating Courses

- Repeating course(s) (recommended w/ 'CD' or lower):
  - Newer grade **always** replaces prior grade (even if newer grade is lower)
  - Transfer:
    - Credit transfers if 'C' or higher is earned
    - Prior grade is no longer factored into GPAs
      - Earned credit hours but 0 quality points & 0 GPA hours.
      - AP credits also not factored into GPAs.
  - 3 total attempts at any one course.
  - Can be financial aid implications for repeats.

# Spring & Summer Registration

- What should I register for?
  - Use the correct flow chart
  - See an advisor to make sure you're using the right one
    - Gold, blue, or purple (dated March 2021)
  - Don't assume column by column
- Priority schedule
- Contacts for filled sections
- Summer semester



*Sample Course Plan: All required courses are offered each fall and spring semester.*

*Students may take courses in any semester as long as pre-requisites are met.*



128 Total Credits  
March 2021

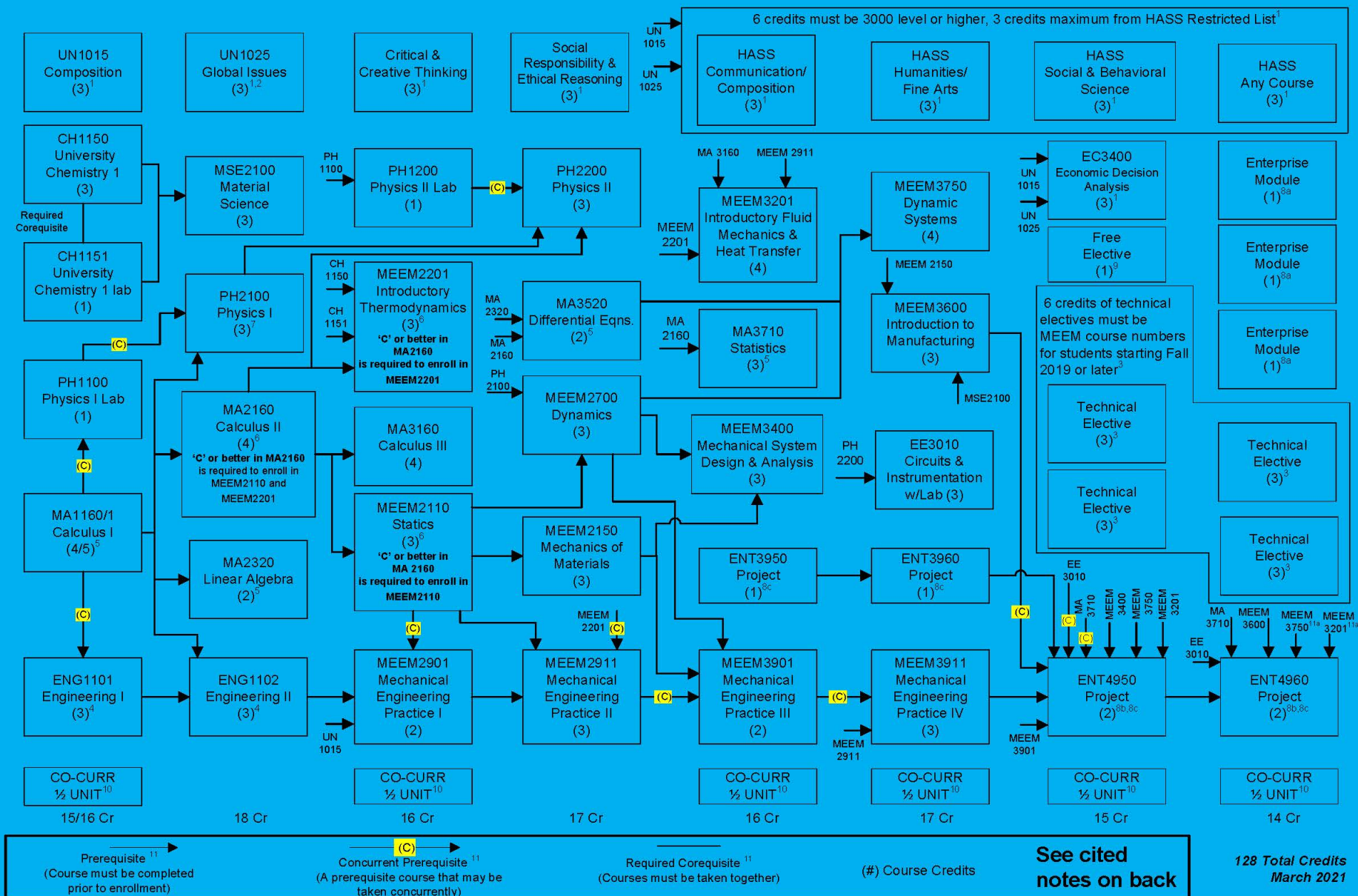


# Michigan Tech

## Bachelor of Science-Mechanical Engineering

### Enterprise Concentration

*Sample Course Plan: All required courses are offered each fall and spring semester. Students may take courses in any semester as long as pre-requisites are met.*







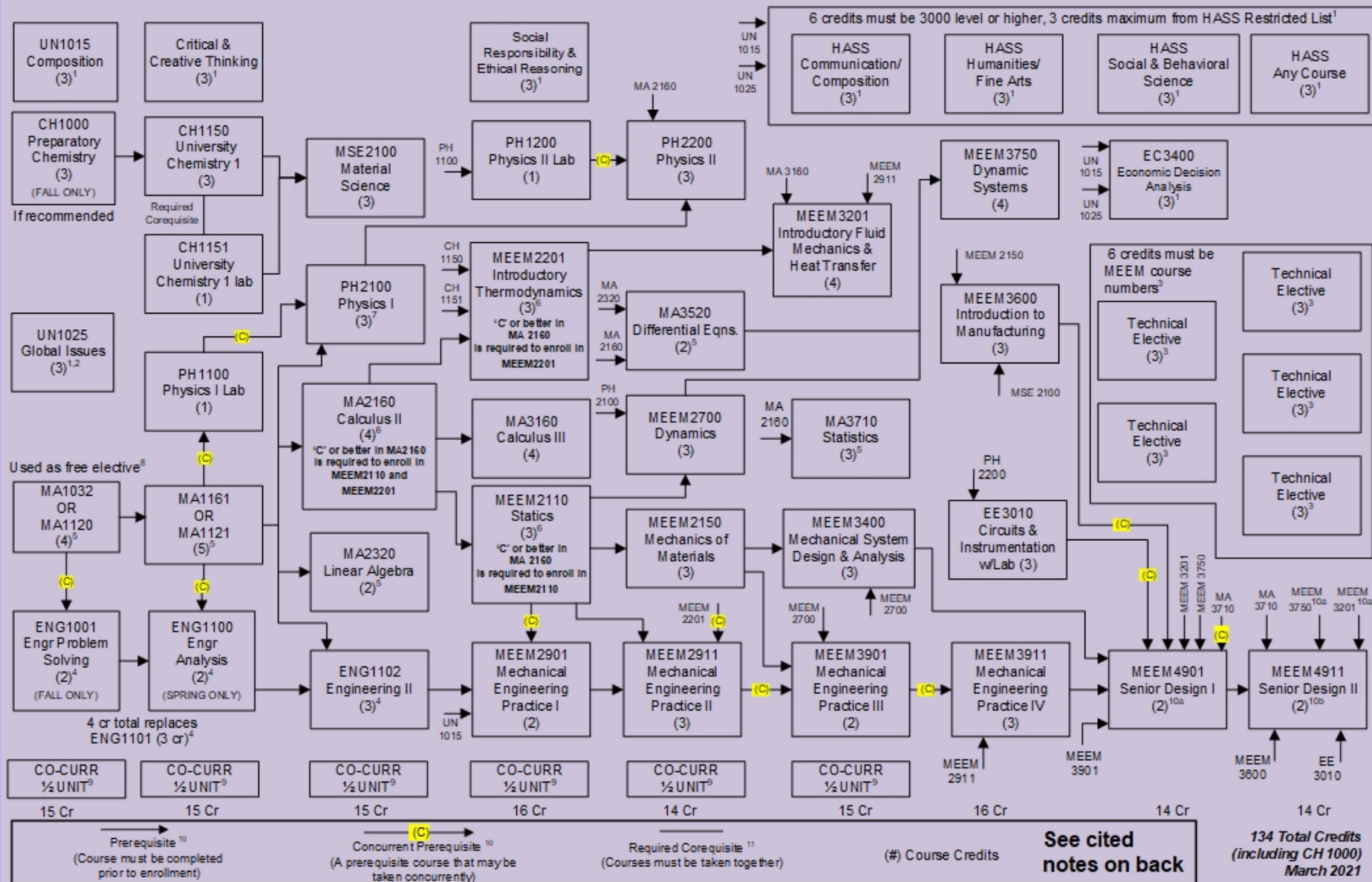
# Michigan Tech

## Bachelor of Science-Mechanical Engineering

For students with math placement below calculus.

Sample Course Plan: All required courses are offered each fall and spring semester.

Students may take courses in any semester as long as pre-requisites are met.



# Course Load Guidelines

- For overall semester load, number of courses is as or more important than number of credits.
- 4-5 courses (plus labs/PE), try to make one course a gen ed each semester
- All required BSME courses offered every semester (fall and spring), no need to rigidly follow the columns on the flow chart
- Courses can be transferred from many other colleges/universities during summers.
- Courses can be taken here at Tech during summers (one or both tracks, we will publish Summer 2022 flow chart).

# Now in MA 1032 (1120), ENG 1001

## Spring options:

ENG 1100 (completes substitution for ENG 1101)	2
PH 1100	1
MA 1161/1121	5/4
UN 1025 or language, UN 1015, CCT/SRER, HASS	3
CH 1150/1 (if needed) and CH1153	
<b>OR</b> MSE 2100	3 - 5
Co-curricular/s	0.5 - 1
<b>TOTAL:</b>	<b>13-17</b>

**Don't overload!** If a lower credit load is necessary for you, work with an advisor on the best options and possible summer transfers

# Now in MA1160(1)/2160/3160, ENG1101, PH1100, CH 1150/1151

## Spring options:

- |  |         |
|--|---------|
| ▣ ENG 1102                                     | 3       |
| ▣ PH 2100                                      | 3       |
| ▣ MA 2160/3160/2320                            | 2-4     |
| ▣ MSE 2100                                     | 3       |
| ▣ UN 1025 or language, UN 1015, CCT/SRER, HASS | 3       |
| ▣ Co-curricular/s                              | 0.5 - 1 |

**TOTAL:** 13-17

**Don't overload!** If a lower credit load is necessary for you,  
work with an advisor on the best options and possible  
summer transfers



# Calculus Lab Sections

- For MA 1161, MA 2160, or MA 3160, you must register for a lab section (L0X) along with the recitation (lecture) section (R0X).
- These sections must match: L01 with R01, L02 with R02, etc.
- If you get a linked section error for a calculus course you are trying to add, this is the problem.
- If your calculus course doesn't add because of this, you will then get pre-req errors for any courses that depend on the calculus as a concurrent pre-req.
  - ▣ PH 1100, ENG 1100, etc.

# MA 2320

- You may not want to attempt to take MA 2320 with MA 2160 or MA 3160.
- MA 2320 can be transferred from almost all other colleges/universities during Summer 2022.
- Can be taken here at Tech during Summer 2022 during either track.
- Transfer may be better than online, accelerated course.

# ENG 1102

- Different design project depending on section
- Topic/section number/days/times information have been or will be sent through e-mail and announced in ENG 1101 sections (advisors will have copies if you missed this)

## UN 1015 – Composition &

## UN 1025 – Global Issues

- Required courses to be taken in first year for all Michigan Tech students
- First year students are given first priority when for scheduling these courses.
- Make every effort to take these in your first year/summer.
- **Can transfer from another school over the summer.**
- **UN 1015 is a non-concurrent pre-req for MEEM 2901.**
- UN1015 and UN1025 are prerequisites for 3000-level HASS

# UN 1025 – Global Issues

- Modern Language option:
  - Approved 3000-level or higher language course (3 credits) substitutes for UN 1025
    - See modern language web page for list of acceptable courses
  - Spanish, French, and German available
  - Language courses at any level count as HASS
    - No double counting if used for UN1025
- If you have previous experience, you must take the online Modern Language Placement Test
  - If you place into an advanced course, placement credits can be earned for previous courses with a 'B' or better in first course taken (validation course).

**Modern Language web page linked to  
ME Advising page**

# Language Minors Advisor

- French, German, Spanish

Maria Bergstrom

[mjbergst@mtu.edu](mailto:mjbergst@mtu.edu)

316 Walker

487-0984

# General Education (24 credits)

UN 1015 – Composition

UN 1025 – Global Issues (or 3000-level language)

Critical & Creative Thinking

Social Responsibility & Ethical Reasoning

HASS - Communication/Composition	3 credits
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HASS - Humanities/Fine Arts	3 credits
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HASS - Social & Behavioral Science	3 credits
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HASS - Any list	3 credits
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Co-Curricular -	3 units (6 half-units)
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Co-curriculars are counted towards semester credit totals (tuition total, part of 12 minimum semester credits for full-time student status), but not counted in total credits required for degree.

# Critical & Creative Thinking – 3 cr

ART1000 Art Appreciation  
HU2130 Introduction to Rhetoric  
HU2324 Introduction to Film  
HU2501 American Experience in Literature  
HU2503 Introduction to Literature  
HU2538 British Experience in Literature  
HU2700 Introduction to Philosophy  
HU2820 Communication and Culture  
HU2910 Language and Mind  
MUS1000 Music Appreciation  
SND1000 Sound in Art and Science  
SS2300 Environment and Society  
THEA1000 Theatre Appreciation

Semesters/years offered subject to change. Refer to the schedule of classes in BanWeb for current offerings, pre-requisites, restrictions, attributes, and course descriptions.

# Social Responsibility & Ethical Reasoning – 3 cr

EC2001 Principles of Economics  
PSY2000 Introduction to Psychology  
SS2100 Introduction to Cultural Anthropology  
SS2200 Introduction to Archaeology  
SS2400 Introduction to Human Geography  
SS2500 United States History to 1877  
SS2501 US History Since 1877  
SS2502 European History to 1650  
SS2503 European History Since 1650  
SS2504 World History to 1500  
SS2505 World History Since 1500  
SS2600 American Government and Politics  
SS2610 Introduction to Law and Society  
SS2700 Introduction to Sociology

Semesters/years offered subject to change. Refer to the schedule of classes in BanWeb for current offerings, pre-requisites, restrictions, attributes, and course descriptions.



# HASS Distribution courses (12 credits)

- Communication/Composition list - 3 cr
  - HU2810 Research & Writing in Communication
  - HU2830 Public Speaking & Multimedia
  - HU3015 Advanced Composition
  - HU3120 Technical and Professional Communication
  - HU3130 Rhetoric of Science and Technology
  - HU3151 The Rhetoric of Everyday Texts
  - HU3606 Editing
  - HU3621 Introduction to Journalism
  - HU3693 Science Writing
  - HU3694 Grant Writing
  - HU3832 Advanced Digital Presentation
  - HU4625 Risk Communication
- 3 credits minimum from Humanities/Fine Arts list
- 3 credits minimum from Social & Behavioral Science list
- 3 credits can be from any list
- No more than 3 credits from HASS restricted list
- Six credits must be at the 3000-level or higher

# Spring/Summer 2022 Registration

## October 24<sup>th</sup> – November 9<sup>th</sup>

**Registration priority based on number of credits earned at the time of registration (see handout)**

- **Does not include currently enrolled credits, except track A courses you have passed (PE, ENG 1002, etc).**
- **Check BanWeb for current (overall) earned hours and registration time/status.**
- **Registration begins online at 10 pm or 11 pm (BanWeb)**
- ***Web registration closed 2:00-2:30 am daily***
- ***Register on time to avoid unnecessary conflicts and full sections!***

# Plan your schedule in advance

- Can log into BanWeb **now** to look at Spring (and Summer soon) 2022 sections.
- See Registrar's Office website [mtu.edu/registrar](https://mtu.edu/registrar) (Students/Registration/Registration Instructions)
  - Video tutorial
- Plan schedule with CRNs and have alternate plans in case you run into filled sections.
  - Only use Contacts for Filled Sections if there is no other way to complete your schedule.

# Contacts for filled sections (ME Advising page FAQ #9)

- By subject
- Use handout
- Intended for situations where scheduling conflicts **cannot be avoided** unless added to an already filled section (not for time/instructor preferences).
- For MEEM courses, use Google form to be added to a waiting list (email instructions).

# Summer Classes at Tech

- Register for summer with spring (or later)
- Summer registration stays open online until summer semester begins
- Tracks A and B (5/9-6/24 & 6/27-8/12)
- Pace is fast – plan wisely
  - Example: 3 credit class meets 6 hours/week for only 7 weeks. Covers same material as full-semester version.
  - Suggest no more than 2 courses (~6 credits) per summer track. 1 STEM and 1 gen ed
- Most BSME courses offered in the summer
- Fall 2022 starts Monday, August 29<sup>th</sup>

# Transfer credit (ME Advising page FAQ #5)

- Online Listings
  - ▣ Transfer Equivalency System
  - ▣ Only use this tool (save screenshot)
- Earn 'C' or better (2.00) equivalent to transfer to Tech
- Michigan schools:
  - ▣ See Transfer Services page for guest application
- May repeat courses

Don't equate your  
**education** to just what  
you have to take to get a  
mechanical engineering  
degree at Michigan Tech.

# Why an Academic Plan?

- Plan for your ME career
  - ▣ How will you enhance your BSME degree to set you up for the career that you want?
- Optional:
  - ▣ Enterprise (FAQ #2, ME Advising page)
  - ▣ Minors (ME and non-ME, FAQ #4)
  - ▣ Second degree or double major (FAQ #4)
  - ▣ Study abroad (Pavlis Honors College)  
<https://www.mtu.edu/honors/study-abroad/program/>
  - ▣ Volunteer and extra-curricular activities (I-Link)
  - ▣ Honors Program (Pavlis Honors College)



# Why an Academic Plan?

- Plan for your BSME curriculum
  - ▢ Necessary prerequisites met
  - ▢ Elective courses offered in desired semesters
  - ▢ Graduate when planned and feasible
  - ▢ Loads you can handle
- Consider:
  - ▢ Gen Ed choices, Co-Curricular activities (PE) and Technical Electives
  - ▢ Senior design or Enterprise path
  - ▢ Co-ops/internships



## IMPACTS OF A CO-OP

DEPARTMENT	Co-op / Median Salary / Placement Rate			
	YES		NO	
	MedianSalary	PlacementR..	MedianSalary	PlacementR..
Biological Sciences	-	-	45,000	92.86%
Biomedical Engineering	60,500	85.71%	60,000	83.78%
Chemical Engineering	72,000	96.43%	63,000	89.13%
Chemistry	-	-	35,360	81.82%
Civil & Environmental Engineering	55,000	89.47%	56,000	97.2%
Cognitive & Learning Sciences	-	-	30,160	94.44%
College of Engineering	69,000	100%	65,000	100%
Computer Science	90,000	100%	63,000	89.36%
Electrical and Computer Engineering	72,000	100%	68,500	94.29%
Geological & Mining Eng & Sciences	0	100%	51,000	91.3%
Humanities	0	100%	45,800	90.91%
Interdisciplinary Certificates	75,000	100%	0	100%
Interdisciplinary Majors	-	-	0	100%
Kinesiology/Integrative Physiology	-	-	26,000	83.33%
Materials Science and Engineering	65,000	100%	65,000	96.77%
Mathematical Sciences	86,000	100%	60,000	100%
<b>Mechanical Engrg-Engrg Mechanics</b>	<b>69,000</b>	<b>97.85%</b>	<b>65,000</b>	<b>93.68%</b>
Physics	0	100%	38,000	90.91%
Sch Forest Resources & EnvironSci	24,960	100%	40,000	90%
School of Business and Economics	72,500	100%	46,500	90.38%
School of Technology	72,000	100%	57,900	85.29%
Social Sciences	-	-	47,436	86.67%
Visual & Performing Arts	-	-	37,500	100%

CO-OP	NOCO-OP
US Citizens	
\$65,450	\$60,000
US Citizens - Male	
\$68,000	\$61,000
US Citizens - Female	
\$65,000	\$57,550
US Citizens - GPA Above 3.0	
\$68,000	\$61,019
US Citizens - GPA Below 3.0	
\$62,400	\$57,500
International Students	
\$75,000	\$63,700
Placement Rate	
97.94%	91.30%

# Academic Planning Materials

- Your correct flowchart for BSME (gold, purple) or  
BSME – Enterprise Concentration (blue)
- Elective lists
  - ▣ Critical & Creative Thinking
  - ▣ Social Responsibility & Ethical Reasoning
  - ▣ Co-Curricular
  - ▣ HASS
  - ▣ Technical Electives
- Schedule of classes – online (BanWeb)
- Course descriptions – online (BanWeb)
- Planning worksheets



# ME Academic Advisors

Ryan (ratowles) & Tricia (pmstein)

906-487-2564

ME Advising Center

204A/204B (203) MEEM

<https://www.mtu.edu/mechanical/undergraduate/advising/>