

# First-year Spring Advising Meeting

## Electrical Engineering Spring 2021

Have your flowchart handy

### Agenda:

- Registration tour
- Choosing classes for next semester
- How to join enterprise
- Programming course(s) (which one is best for me?)
- Course drop deadline current semester
- Taking summer classes
- Explore:
  - concentrations, minors, co-op, study abroad, accelerated masters

Write down your  
questions as you go.

The links within these slides are activated to get you to relevant information.

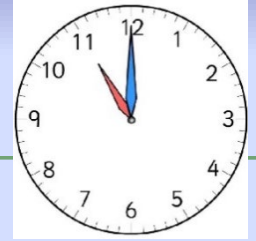
Judy Burl, Academic Advisor  
EERC 131

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

Appointments: see [How to contact me](#)

# REGISTRATION DATES

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- Fall 2021 registration opens **March 14<sup>th</sup>** following the
  - Registration Priority Schedule (shows your start date & time)
  - Based on the number of credits you've *completed*.

Mark Your  
Calendars!

- Fall registration closes April 4th, then *re-opens April 6<sup>th</sup> 10pm.*  
*and will remain open* until fall classes begin.
- Summer registration is open until classes begin
- Summer classes begin and end:

**Track A:** May 10 – June 25

**Track B:** June 28 – Aug 13

# REGISTRATION TOUR

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## 1. ECE Advising Pages

1. Computer Engineering (8-sem. flowcharts and electives lists)
2. Electrical Engineering (8-sem. flowcharts and electives lists)
3. Robotics Engineering (8-sem. flowcharts and electives lists)

## 1. Prepare for Registration

1. General education (Core, HASS and co-curricular lists)
2. Schedule of Classes
3. Approval/Waiver Form
4. Course Descriptions
5. Registration Forms

*New!*

Visual and Performing Arts Dept (VPA)

Removed course prefix "FA" and are using:

Art - ART  
Music - MUS  
Theatre - THEA  
Sound - SND

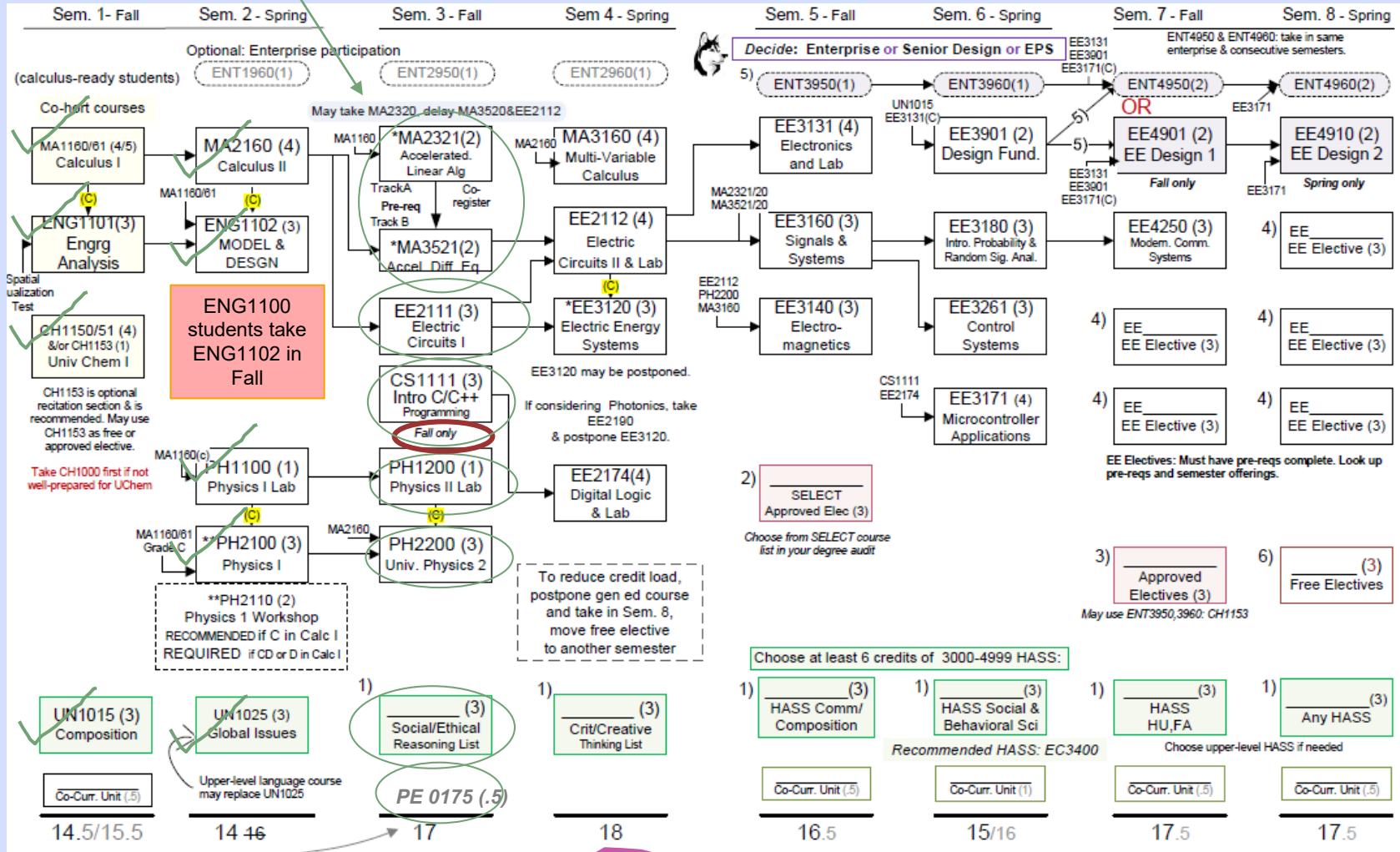
# Choose your courses & Check Prereqs

EE Flowcharts  
Advising webpages

Consider:  
**MA2320**

Normal-paced  
Lin Alg & Diff Eq

Key to note: Differential Equations is a prerequisite for EE2112.



CS1111  
or  
CS1121?  
Take  
CS1121 if  
considering  
CS minor or  
CpE Double  
Major

Consider taking a class in summer to avoid an 18 credit semester in Spring of 2<sup>nd</sup> year.

# Sample schedules for semester 3 Fall

choose your next math course

## **MA1121 or MA1160 or MA1161 Calculus I**

CS1111 – C programming

PH1100 – Physics by Inquiry 1 (if not taken)

PH2100 – University Physics 2

Critical and Creative Thinking or

Social Resp. Course or HASS

## **MA2160 – Calculus II**

CS1111 – C Programming

ENG1102 – Engineering Modeling & Design

PH1200 – Physics by Inquiry 2

PH2200 – University Physics 2

Critical and Creative Thinking or

Social Resp. Course or HASS

## **MA2321 and MA3521 – Accelerated**

EE2111 – Circuits 1

CS1111 – C Programming

PH1200 – Physics by Inquiry 2

PH2200 – University Physics 2

Critical and Creative Thinking

or Social Resp. Course or HASS

## **MA3160 – Multivariable Calculus**

EE2111 – Circuits 1

CS1111 – C Programming

PH1200 – Physics by Inquiry 2

PH2200 – University Physics 2

Critical and Creative Thinking

or Social Resp. Course or HASS

- Recommendation: Take MA1160 or MA2160 in Summer if not completed in first year. May take at a Community College or MTU.
- If you have not yet taken UN1015 or UN1025 – may take in summer at CC, or schedule after it in fall class restriction removed.
- Take MA2320, normal paced Linear Algebra, if you're not ready for the accelerated pace of math courses (MA2321 & MA3521).
- If you're interested in additional programming and CS courses, CS minor, or double-major with CpE – take CS1121, java, instead of CS1111, C. If you know a programming language, take [CS Assessment](#) if interested in CS1131 (accelerated Intro to programming in java).

### **Filler courses: Need more credits?**

Take CH1150 and CH1151 if not yet completed.

HASS course – follow the guidelines and check your degree audit report to see which list and level you need.

### Co-curricular activity

Join an enterprise ENT2950 – 1 cr. (optional)

# How to register in Linear Algebra and Differential Equations

Critical Skills!

## MA2321 and MA3521 accelerated – *both in same semester*

- Take Linear Algebra & Diff Eq before taking MA3160
- MA2321(track A) *is the pre-requisite* for MA3521(track B)
- Register for **both** CRN's MA2321 and MA3521 else **"Link Error"**  
81138 and 81141
- Take at least **14 Credits** (*financial aid safety net with accelerated courses*)

Is the Accelerated Pace right for you?

Mathematical Sciences									
CRN	Subj	Crse	Sec	Cmp	Cred	Title	Days	Time	
81138	MA	2321	R01	1	2.000	Elementary Linear Algebra	MTWR	03:00 pm-03:50 pm	

Mathematical Sciences									
CRN	Subj	Crse	Sec	Cmp	Cred	Title	Days	Time	
81141	MA	3521	R01	1	2.000	Elem Differential Equations	MTWR	03:00 pm-03:50 pm	

OR

## MA2320 in Fall, then MA3520 in Spring *separate semesters*

- May or may not add a semester to graduation plans.
- You cannot take EE2112, Circuits II, until Differential Equations is *complete*.
- If you are NOT strong in Math, do not take accelerated courses.

80209	MA	2320	R01	1	2.000	Elementary Linear Algebra	TR	02:00 pm-02:50 pm
82212	MA	2320	R02	1OL	2.000	Elementary Linear Algebra	TBA	
83002	MA	2320	R03	1	2.000	Elementary Linear Algebra	TR	10:00 am-10:50 am

# WHICH PROGRAMMING CLASS ?

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CS1111 – Introduction to Programming in C/C++

CS1121 – Introduction to Programming I (java) May replace CS1111

CS1122 - Introduction to Programming II (java) May count in Approved Electives

CS1131 – Accelerated Introduction to Programming (For students who already know programming)

CS1142 – Programming at the Hardware/Software Interface (may count in SELECT)

[Link to Course Descriptions](#)

## EE Majors:

- ❑ Take CS1111, C programming.
- ❑ ‘C’ is the best language for Electrical Engineers to know.
- ❑ If considering a CS minor or CpE/EE double-major, or want additional programming skills, take CS1121 or CS1131 instead of CS1111.
- ❑ Additional programming skills desired? Take CS1121, CS1122, CS1142.

## CS Minor and CpE/EE Double-majors :

- ❑ Start with CS1121 or CS1131
- ❑ If you’ve completed CS1121, take CS1122 next.
- ❑ If you’ve completed CS1131, consider CS1142 next.

# SCHEDULE OF CLASSES

## Registrar's webpage Schedule of Classes (SoC)

**LINK ERROR** = missing lab or co-requisite section

Sections Found

Computer Science

CRN	Subj	Crse	Sec	Cmp	Cred	Title	Days	Time	Cap	Act	Rem	Instructor	Date (MM/DD)	Location	Fee
<a href="#">83045</a>	CS	1111	L01	1	0.000	Intro to Programming in C/C++	F	02:00 pm-03:50 pm	26	0	26	Zhang	08/30-12/10	28 0112	Lab/Course Fee: \$40.00
<a href="#">84006</a>	CS	1111	L02	1	0.000	Intro to Programming in C/C++	R	02:00 pm-03:50 pm	26	0	26	Zhang	08/30-12/10	28 0112	Lab/Course Fee: \$40.00
<a href="#">84007</a>	CS	1111	L03	1	0.000	Intro to Programming in C/C++	R	04:00 pm-05:50 pm	26	0	26	Zhang	08/30-12/10	28 0112	Lab/Course Fee: \$40.00
<a href="#">84668</a>	CS	1111	L04	1	0.000	Intro to Programming in C/C++	F	12:00 pm-01:50 pm	26	0	26	Zhang	08/30-12/10	28 0113	Lab/Course Fee: \$40.00
<a href="#">82877</a>	CS	1111	R01	1	3.000	Intro to Programming in C/C++	TR	08:00 am-08:50 am	104	0	104	Zhang	08/30-12/10	15 0135	

[Return to Previous](#)

Click CRNs

to see course details (such as pre-requisite, co-requisite, restrictions)

CS1111: Choose any lab section (L01 or L02 or L03 or L04)  
*with* the lecture section R01. Key in two  
CRN's.

(CS1121, CS1131, CS1122 – same. Choose any lab section)



# Registration Form for approvals and waivers

## Registration error?


1. Print waiver form - Registrar's webpage or fill in digitally.
1. Fill in name, ID, and course information
1. Take (or email) form to instructor for approval
1. If approved, take signed form to the Student Services Center – Admin Bldg (Registrar's Office) Or E-mail the form to [schedule@mtu.edu](mailto:schedule@mtu.edu)
1. *Most enterprises* require this form

## Full section? *what to do:*

For full EE courses, sign up on the ECE course waitlist for Fall 2021.

### For out-of-department courses:

- find another section
- check often for a seat to open
- postpone/switch with a future course
- contact the course instructor or advisor in that department.

 **Michigan Tech** Registrar's Office  
registrar@mtu.edu  
906-487-2319

### Approval/ Waiver form

Approval / Waiver Form

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**Student Information**

Mxxxxxxx Burl Judy M.  
M-number Last Name First Name

**Waiver type**

Prerequisite - Allows enrollment although the student fails to meet the course prerequisites

Co-requisite - Allows enrollment of a course while waiving the co-requisite course

Special Approval - Allows enrollment of a course that requires Instructor or Department approval

Major - Allows enrollment of a course restricted to specific majors, minors, and/or departments

Level - Allows enrollment of an undergraduate student in a graduate course, or vice versa

Class Restriction - Allows enrollment of a course outside of the student's current standing (freshman, sophomore, etc.)

Time Conflict - Allows enrollment of 2 courses scheduled at a conflicting time (**requires both instructors' signatures**)

Class Capacity - Allows enrollment in a course that has reached the maximum enrollment capacity

         **Approved number of research credits**

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**Course Information**

ENT2950 Fall 2021  
CRN Semester/Year

85432  
Course Subject/Number (ex. BUS 1100)

                   
CRN Semester/Year

          
Course Subject/Number (ex. BUS 1100)

                            
Instructor/Department (Print Name) Signature Date

                            
Instructor/Department (Print Name) Signature Date  
(Second signature required for time conflicts only)

**Completed form must be submitted to the Registrar's Office** Revised 3/11/2020

# WHAT IS ENTERPRISE ?

Add project-work and business skills  
to your undergraduate experience

- [View Project teams here.](#)
- May begin as early as first or second year (ENT1960, ENT2950, ENT2960)
- May complete **engineering design requirements** (ENT3950, ENT3960, ENT4950, ENT4960)
- Technical project work plus develop business and leadership skills

## *ECE Department Enterprises:*

- BMSE – Blue Marble Security **L02** (Dr. Glen Archer EERC 629)
- RSE – Robotic Systems **L15** (Dr. Jeremy Bos EERC 623 or Dr. Tony Pinar EERC 731)
- WCE – Wireless Communication **L03** (Mr. Kit Cischke EERC 520)
- ITOE – IT Oxygen Enterprise – L10 (Mr. Nagesh Hatti EERC 712) **Not approved for Engineering Design yet.**

*but can be taken at 2000 and 3000 levels.*

## *Other enterprises:*

Aerospace  
Advanced Metalworks  
Green Campus Enterprise  
Supermileage Vehicle  
Innovative Global Solutions  
Open Source Hardware  
SENSE

Many more... Visit the [enterprise website](#)

## **Enterprise Project Work Registration checklist:**

- Register in ENT2950 if you have six semester left
- Use ENT1960 if you have 7 semesters left
- Registration guide - # semester you have remaining
- Look up Section Number and instructor on Schedule of Classes
- Use Approval/Waiver Form for registration

# SAME COURSE #- DIFFERENT SECTION # FOR ENTERPRISE PROJECT WORK

## Sections Found

### Enterprise

CRN	Subj	Crse	Sec	Comp	Cred	Title	Days	Time	Cap	Act	Rem	Instructor	Date (MM/DD)	Location	Fee
81531	ENT	2950	L01	1	1.000	Advanced Metalworks		TBA	25	0	25	Sanders	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81537	ENT	2950	L02	1	1.000	Blue Marble Security	R	07:00 pm-07:50 pm	25	0	25	Archer	08/30-12/10	08 0642	Lab/Course Fee: \$50.00
81543	ENT	2950	L03	1	1.000	Wireless Communication	R	07:00 pm-07:50 pm	25	0	25	Cischke	08/30-12/10	08 0641	Lab/Course Fee: \$50.00
81554	ENT	2950	L05	1	1.000	Formula SAE	T	07:00 pm-07:50 pm	25	0	25	Declerck	08/30-12/10	95	Lab/Course Fee: \$50.00
81560	ENT	2950	L06	1	1.000	Blizzard Baja Enterprise	M	05:00 pm-05:50 pm	25	0	25	Johnson	08/30-12/10	20 0120	Lab/Course Fee: \$50.00
81568	ENT	2950	L07	1	1.000	Clean Snowmobile Challenge	T	07:00 pm-08:20 pm	25	0	25	Blough	08/30-12/10	20 0302	Lab/Course Fee: \$50.00
81580	ENT	2950	L08	1	1.000	Consumer Product Mfg	R	04:00 pm-04:50 pm	25	0	25	Rogers	08/30-12/10	19 0101	Lab/Course Fee: \$50.00
83342	ENT	2950	L09	1	1.000	SENSE Enterprise		TBA	10	0	10	Barnard	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81588	ENT	2950	L10	1	1.000	IT Oxygen: Information Tech	W	05:00 pm-05:50 pm	25	0	25	Walker , Hatti	08/30-12/10	14 0208	Lab/Course Fee: \$50.00
81594	ENT	2950	L11	1	1.000	BoardSport Technologies	T	TBA	25	0	25	Miskioglu	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81609	ENT	2950	L13	1	1.000	Supermileage Systems	T	05:00 pm-05:50 pm	25	0	25	Berkey	08/30-12/10	08 0641	Lab/Course Fee: \$50.00
81615	ENT	2950	L15	1	1.000	Robotic Systems	W	07:00 pm-07:50 pm	25	0	25	Bos	08/30-12/10	07 0214	Lab/Course Fee: \$50.00
81621	ENT	2950	L16	1	1.000	Innovative Global Solutions	W	TBA	25	0	25	Tewari , Manser	08/30-12/10	12 0724	Lab/Course Fee: \$50.00
81633	ENT	2950	L18	1	1.000	Husky Game Development	R	05:00 pm-05:50 pm	35	0	35	Kuhl	08/30-12/10	15 0139	Lab/Course Fee: \$50.00
81639	ENT	2950	L19	1	1.000	Humane Interface Design (HIDE)	W	TBA	25	0	25	Pastel	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81651	ENT	2950	L21	1	1.000	Aerospace Enterprise		TBA	25	0	25	King	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81664	ENT	2950	L23	1	1.000	Alternative Energy Enterprise	T	04:00 pm-04:50 pm	25	0	25	Mel drum	08/30-12/10	07 0214	Lab/Course Fee: \$50.00
81890	ENT	2950	L26	1	1.000	Built World Enterprise	R	04:00 pm-04:50 pm	10	0	10	Morse	08/30-12/10	14 0208	Lab/Course Fee: \$50.00
81884	ENT	2950	L27	1	1.000	CinOptic Communication/Media		TBA	5	0	5	Smith	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81645	ENT	2950	L30	1	1.000	Green Campus Enterprise	R	05:00 pm-05:50 pm	20	0	20	Handler	08/30-12/10	08 0875	Lab/Course Fee: \$50.00
81670	ENT	2950	L31	1	1.000	Velovations		TBA	10	0	10	Lehmann	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81627	ENT	2950	L32	1	1.000	Mining Innovation Enterprise	T	05:00 pm-05:50 pm	20	0	20	Van Susante	08/30-12/10	TBA	Lab/Course Fee: \$50.00
81601	FNT	2950	L33	1	1.000	Open Source Hardware		TBA	25	0	25	Pearce	08/30-12/10	TBA	Lab/Course Fee: \$50.00
Browse	NT	2950	L34	1	1.000	GEAR Enterprise		TBA	20	0	20	Hamlin	08/30-12/10	TBA	Lab/Course Fee: \$50.00
84680	FNT	2950	L35	1	1.000	HOTFOREST Enterprise		TBA	5	0	5	Rudnicki	08/30-12/10	TBA	Lab/Course Fee: \$50.00

Link to the [Schedule of Classes \(SOC\)](#)

# TAKING CLASSES DURING SUMMER?

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If you have time to attend a class and put in the effort:

## Where?

- Online through Michigan Tech or on-campus (search Schedule of Classes)
  - Track A or Track B or full summer
- Community college or college near you for transfer credit

## Why?

- To get ahead or get caught up
- To lighten future semester course loads (such as semester 4 on the flowchart)
- To repeat a course for better understanding and/or improve your GPA (CD or lower)
  - Third attempt [form](#) is required if the class was taken twice before

## Summer course suggestions:

Composition

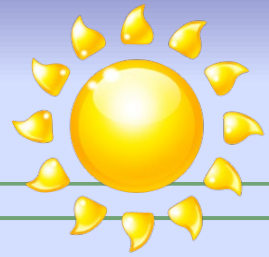
Global Issues

Your next Math course

University Chemistry

General education course – *ensure it is one that you need.*

# SUMMER CLASSES? Prereq for fall?



Notify [transfer@mtu.edu](mailto:transfer@mtu.edu) if you are taking summer courses elsewhere that are prerequisites to courses you need in fall. Temporarily “In Session”. Send final transcript upon completion.

Some Michigan colleges will request a guest application :  
Complete a Guest Application – via the Registrar’s Office.

Transfer Equivalency List – Look for previously evaluated courses

Send syllabus to [transfer@mtu.edu](mailto:transfer@mtu.edu) for evaluation (if course is not listed on the equivalency list)

A grade of “C” or higher is required to transfer a course to MTU

MTU Transfer Services

Student Services Center, Admin 110

487-3323

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

# TRACK B

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Track B = Part of Term  
B

Track B Classes begin week of Monday, March 1st .

- Can add courses until Thursday, March 4<sup>th</sup> (use first -year permission form)
- March 19 is deadline to drop Track B courses without a grade.
- April 9 is deadline to drop Track B courses with a “W” grade.
- After April 9<sup>th</sup>, no dropping of Track B courses, except in extenuating circumstances beyond a student’s control. (such as hospitalization)

Track B: Don’t forget:

PE courses – track B - if you registered

# SHOULD I DROP A COURSE?

*Form for first -year  
Student permission to Drop or Add courses  
For current semester*

[Click here for Add/Drop Deadlines](#)

## Decide:

- ❑ Mid-term grades of satisfactory or unsatisfactory are available in MyMichiganTech Monday, March 1st , after 5pm.
- ❑ Meet with academic advisor or Success Center coach if two or more “UN” grades.
- ❑ If you are behind or not doing well in a course, talk with your instructor and then your academic advisor.

## How to Drop a course:

- ❑ Use the first -year student drop/add [permission form](#) (Also available in Advising Office – the Orange Form)
- ❑ Instructor and advisor signatures are required.
- ❑ Friday, March 26<sup>th</sup> is LAST DAY to drop. *Get form done well in advance of 5pm .*
- ❑ After March 26<sup>th</sup>, no drops are allowed for low grades .

Permission from Dean of Students Office is required to drop a course if you had extenuating circumstances beyond your control. Call: 487-2212. Email: deanofstudents@mtu.edu

M-number		Last				First				Date
A D D	Subj	Crse #	Lec Sec #	Lec CRN	Rec Sec #	Rec CRN	Lab Sec #	Lab CRN	*Instructor/Advisor signature and date (required after week 1)	
D R O P	Subj	Crse #	Lec Sec #	Lec CRN	Rec Sec #	Rec CRN	Lab Sec #	Lab CRN	*Instructor/Advisor signature and date (required after week 3)	
SECTION CHANGES	Subj	Crse #	Sec # Drop	Sec CRN Drop	Sec # Add	Sec CRN Add	Instructor signature and date (required from instructor of section being added after week 1)			

Advisor Print Name \_\_\_\_\_ Advisor Signature \_\_\_\_\_ Date \_\_\_\_\_

Student athletes must have the signature of the Compliance Director \_\_\_\_\_

Approved changes must be submitted to the Registrar's Office on the same day as approval is granted.  
All other necessary forms must also be submitted (i.e., prerequisite/special approval waivers, class/major restrictions, etc.).  
\*Both signatures are required.

# REPEATING A COURSE

## GRADE OF “CD” OR LOWER

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- ❑ On the Web: [course repeat policy](#) (Registrar’s website)
- ❑ May repeat course with a **grade of CD or lower** .
  - ❑ Courses taken in Covid semesters may be repeated regardless of grade - Spring 2020, Fall 2020
- ❑ The **most recent grade** is used in your GPA calculation. Even if the previous grade was higher.
- ❑ Maximum of 3 attempts to pass a course. (Try to complete 1<sup>st</sup> or 2<sup>nd</sup> try!)
- ❑ “W” grade does not count as an attempt. (Withdraw)
- ❑ Permission from the Dean of Students, Financial Aid *and* your academic advisor is required to repeat a course a *2nd* and *final* time (the third attempt to pass). (try hard not to need a 3<sup>rd</sup> attempt at a course)
- ❑ Take a repeat seriously, start from scratch, attend all classes.



# ECE LEARNING CENTER EERC 123

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Spring 2021 Coaches available:

Sunday – Thursday 6:00 – 8:00 pm

[Online info](#)

MWR 1:00 – 4:00 pm and T 1:00 -3:00


- [Link to ITC Learning Center Hours](#) and Zoom Link to access help
- Help with EE2174, EE2111, EE2112, and if coaches have completed EE3171, EE3131, etc., math and programming skills
- See your instructors for help during their office hours
- All Department Learning Centers: [locations](#)
- [Multi-literacy Center](#) - Walker 107 – help with writing and communication for ALL CLASSES. Via online appointments.

# MORE TO KNOW ABOUT : VISIT THESE LINKS

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- ❑ [Concentrations](#) for EE's (optional)
  - ❑ To “Add” a concentration , submit a request online in the Curriculum Change Portlet in MyMichiganTech. Meet with Judy for planning help.
- ❑ [Minors](#) (optional)
- ❑ [How to join an Enterprise](#)
  - ❑ [Approval Waiver form](#)
- ❑ [Co-op and summer internships](#)
- ❑ [Accelerated Masters](#)
- ❑ [Studying Abroad](#) (Pavlis Institute)
- ❑ [Help with study habits, stress management, academic success](#)
- ❑ [Help with ECE coursework](#)
- ❑ [List of Learning Centers](#)
- ❑ [List of Academic Advisors](#) for major and minors

Be truly interested in your classes, major and field for better success!



# Judy's Advising Office during initial registration period:

I am on vacation  
March 5 - 15th.

## March 16<sup>th</sup> – March 30<sup>th</sup>

- quick registration questions
- course drop procedure
- academic or college life concerns

*See Judy the next morning after you register, if you have registration problems you cannot solve.*

Walk-in hours: MTWRF approximately 9 am – 4 pm  
(gone for occasional meetings)

Zoom advising and walk-ins in mornings; Walk-in EERC 131 afternoons.

For long-range planning of future semesters  
schedule an Appointment:

***before March 6<sup>th</sup> or after March 30<sup>th</sup>.***

***using Google Meet appt. slots***

***Note:*** If I hear that Coronavirus is spreading I will have  
Zoom Advising Hours only during registration days.

The End.