

Academic Advising

Monday
August 24th

Offices: EERC 131

Schedule appointments: 487-2550 & EERC 121

ECE Main Office: Michele Kamppinen EERC 121

Electrical Engineers

Judy Donahue

eceadvise@mtu.edu

8:15 – 11:30 and 2 - 4

Computer Engineers

Trever Hassell

tjhassel@mtu.edu

8:30 – 10:30 and MW 2-4

Important advising sites:

mtu.edu/ece/undergraduate/advising

blogs.mtu.edu/jmdonahu/ (ECE advisor BLOG)

mtu.edu/registrar/students/registration/

Fall Advising Meetings are required Sept/Oct/Nov

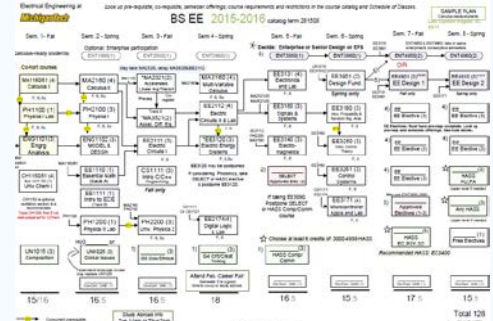
Following degree requirements

Catalog year.

- based on year you began at Tech
- your catalog year is Fall 2015, coded as “201508”
- Degree requirements are defined by catalog year

Your Flowchart.

- Follows requirements for your major and catalog year.
- Sample 4-year plan



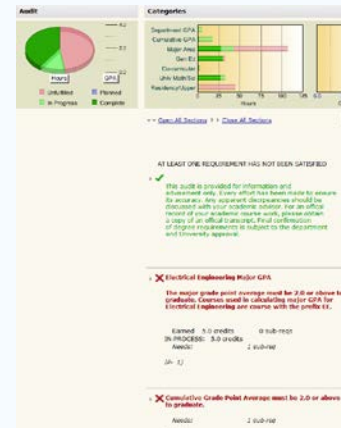
Academic Plan.

- Create your own plan as you progress and make academic and career decisions

Summer of Year	Fall of Year	Spring of Year
Total Credits	Total Credits	Total Credits
Number	Number	Number
Total Credits	Total Credits	Total Credits
Number	Number	Number
Total Credits	Total Credits	Total Credits
Number	Number	Number
Total Credits	Total Credits	Total Credits

Online Degree Audit Report:

- Review your report each time your schedule or change classes
- Access in MyMichiganTech



“pdf” audit form

- Official degree requirements document
- Access on Degree Services Website under “Majors”

CS1 121 Intro to Programming I

CS1 131 Accelerated Intro to Programming

Programming Skills Assessment meeting – Computer Science
Department **Tuesday: 10am - Noon M&M room U115**

CS1 131 (5) may be taken in lieu of both CS1 121 (3) and
CS1 122(3).

CS1 131 is offered in Fall only.

Ready for sophomore CS courses after CS1 122 or CS1 131.

EE majors considering a CS minor or CpE or CS major, may take
CS1 121 (may use in place of CS1 111).

Assessment meeting for EE's: Friday at 2pm

CS1 121 / CS1 131 : how to succeed

CS1 111 – EE's, semester 3

Go to all your lectures & labs and pay attention.

Start homework right away – DO NOT PROCRASTINATE !!

If you don't understand something, get help right away.

- Instructor office hours
- CS Learning Center Rekhi 114

Do not copy code. Do your own work.

Be able to *develop your own logic steps* and write your own code.



Not required, but may count as electives for CpE's:

- 1) **CH1150/51** University Chemistry I
- 2) **ENG1102** Engineering Modeling & Design
- 3) **MA3160** – Multivariable Calculus

Are you on the fence about CpE or CS? Or sure of CpE?

If you are certain you will not switch to a different engineering major in future, or are undecided between CpE and CS. It is safe not to take Chemistry and ENG1102. You can take a different math/sci elective later on. Take ENG1101 or ENG1001 & ENG1100. Follow your flowchart.

Are you on the fence about CpE or EE?

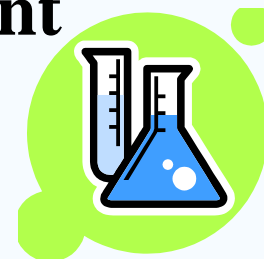
or would you like the option of switching to any other engineering major or adding a double major?

If so, plan to take University Chemistry and ENG1102. Both courses are required for all other engineering majors including EE. Chemistry may be postponed.

Multivariable Calculus (Calc III) – MA3160 is not required for computer engineers.

CH1000 or CH1150?

Make sure you're in the right chemistry



- Take CH1000 – If you did not take H.S. chemistry; or if you earned less than B grades in H.S. algebra **or** chemistry
- Take CH1150/1151/1153 – B or better in H.S. Chemistry **and** Algebra CH1153 is optional, and recommended

CH1000 does not count toward your degree. Take it if you plan to take CH1150/51/53 and you are not well-prepared for University Chemistry. CH1000 is “free elective” credits.

Go to Student Services Center to switch your chemistry course, this week. Admin Building

Chemistry advisors: Lois Blau, Chem-Sci room 206A

Denise Laux, Chem-Sci room 607D

Linear Algebra and Differential Equations

MA2321 and MA3521: **Accelerated** $\frac{1}{2}$ semester each

- taken sequentially in same semester.
- must pass MA2321 to continue in MA3521
- may be difficult resulting in lower grades
- Take minimum of **14 credits (or risk Financial Aid)**

MA2320 and MA3520 **Normal Pace** 1 semester each

- Takes two semesters; Same courses at normal pace
- If you are planning more than 8 semesters
- If calculus II was difficult
- If you are 'ahead' in math
- Increase chances of earning higher grades

Prerequisite chain: **Lin Alg** → **Diff Eq** → **Circuits II**



1. First year: **Take:** **UN1015** Composition (3)
UN1025 Global Issues (3) **or 3000+ level language course**

2. Second year: **Take 6 credits** *Choose one Goal 4 course and one Goal 8 course:*

Goal 4 – Critical and Creative Thinking (3 credits)

FA2330 Art Appreciation
 FA2520 Music Appreciation
 FA2720 Audio Arts Appreciation
 FA2820 Theatre Appreciation
 HU2130 Introduction to Rhetoric
 HU2503 Literary Survey A
 HU2504 Literary Survey B
 HU2538 British Literature
 HU2700 Introduction to Philosophy
 HU2820 Communication and Culture
 HU2910 Language and Mind
 SS2300 Environment and Society

Goal 8 – Social Responsibility & Ethical Reasoning (3 credits)

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

3. HA SS requirements: **Take 12 credits** of **HA SS courses as follows:**

At least 6 credits of HA SS must be upper level (3000+)

- One course from Communication/Composition list
- One course from Humanities/Fine Arts list (HU/FA)
- One course from Social & Behavioral Science list (EC/PSY/SS)
- One course from any above HA SS list or the HA SS restricted list

Gen Ed
Worksheet
on back
of flowchart

4. **Take 3 units** of co-curricular activities

Interested in Modern Language courses?

1. A 3000-4999 level language course may replace UN1025, Global Issues
 - may postpone if need lower course(s) level first
 - up to nine language credits may count in general education
 - up to six credits language may also count in HASS

2. Language Minors: French, German, Spanish (18 - 21 credits)
Language minor advisor: French - Audrey Viguiere [asviguie@](mailto:asviguie@mtu.edu)
German - Karin Schlenker [kbschlen@](mailto:kbschlen@mtu.edu)
Spanish - Leyre Alegre-Figuero [lalegref@](mailto:lalegref@mtu.edu)

3. Language Placement questions:

Language placement Advising TODAY: Walker 120 A

2:30 - 4: French and German

4 - 5:30: Spanish

Dr. Ramon Fonkoue, Walker 323, rafonkou@mtu.edu

Part of Term 1 = full semester course

Aug 31 - Dec 18

Part of Term A = Track A = 1st 7 weeks

Aug 31 - Oct 16

Part of Term B = Track B = 2nd 7 weeks

Oct 19 - Dec 18

Many PE or co-curricular courses are ½ credit and offered in either Track A or Track B. Pay attention to the dates on the schedule of classes and don't forget to start attending a track B course the week of October 19th.

EE1110 – Track A

EE1111 – Track B



Waino Wahtera Center for Student Success

Admin 130

487-3558

- UN1000 – ExSEL Program – Frameworks for Success
 - section can be switched if needed (go to Admin bldg.-Student Services)
 - cannot be dropped
- UN1010 – Living Community – Creating your Success
 - cannot be dropped or switched
- UN1005 – Initiatives for Success
 - includes Learning Center teams

Questions: see Ms. Heather Simpson, 130 Admin
hsimpson@mtu.edu



Finalize your schedule

- Registration session with your orientation group
- Open Wednesday 8 am – Thursday 8am (online)

12 credits is minimum; 18 credits is the maximum

What classes could you **add**?

- CH1000 or CH1150/51/53 or a math/science elective
- Goal 4 – Critical or creative thinking course
- Goal 8 – Social responsibility or Ethical Reasoning course
- HA SS lower level elective course (*pay attention to which list*)
- PE xxxx .5 credit, Part of Term A and/or B



Engineering Cohort Schedule

Do not drop or change a cohort course !!!!!!!!!!!

Go to the **Student Services Center, Admin Bldg**,

if a course you **NEED** is blocked by your cohort schedule.

These courses are taken together for **Fall semester**:

MA1030		MA1031		MA1032		MA1160/1161		MA2160
		ENG1001		ENG1001		ENG1101		ENG1101
						PH1100		PH1100

Spatial Visualization test: **TODAY** at 3pm or 4pm (EERC 103, DOW 641, +)

Spatial Visualization course: ENG1002, one credit

Students w/o ALEKS/AP/TR, take the ALEKS math assessment

Thursday Aug 27, 7pm in Rekhi 215.



Rough!

15⁺

Too many credits?

See Judy or Trever if you want less credits in your first semester.

What class could you postpone?

CH1000, CH1150/51/53, CS1121, or a HA SS list course

Do not postpone chemistry if considering Biomedical Applications concentration (EE's)

You might want a light semester to start with.

12 credits is minimum for full-time status **18 credits is maximum.**

It might be best to take less credits and earn higher grades.

Taking a high number of credits can lead to stressful loads and risking failure of a class. This is a challenging and rigorous program. You won't know your ideal credit load until you've completed a semester or two.

Try NOT to postpone UN1015 and UN1025. Take in first year.

Course Drop Dates

check all at Registrar's Web Site

Last Day to Drop “Without a Grade” recorded:

- Full Term Course – Friday, September 18
- Term A course – Wednesday, September 9
- Term B course – Wednesday, October 28

Mid-term grades available after 5pm, Monday October 19th.

Last Day to Drop – grade of “W” shows on transcript

- Full Term Course - Friday, November 6 - WEEK 10
- Term A course – Friday October 2
- Term B course - Friday, November 20

Dean of Students: 906-487-2212 (special circumstances)

Engineering Design Requirement

3 Options

1. Senior Design project – year long project in senior year sponsored by industry

EE4901 + EE4910

2. Enterprise project work – 4 semesters at junior and senior levels

ENT3950, ENT3960, ENT4950, ENT4960

3. EPS – European Project Semester

EE3901 + EE4901 + EE4910 + ?HA SS credits

BMSE (L02) – Blue Marble Security

Advisor: Dr. Glen Archer, EERC 629 gearcher@mtu.edu

HEV (L04) – Hybrid Electric Vehicle

Dr. John Lukowski, EERC 223 jtukows@mtu.edu

Mr. Bob Page, MEEM 604 rwp@mtu.edu

WCE (L03) – Wireless Communication

Advisor: Mr. Kit Cischke, EERC 520 cmc@mtu.edu

First-year enterprise course number: ENT1960

1 credit for Spring 2016. Take ENT1960 with Calc II.

To Join: Meet with enterprise advisor, use waiver form, register in course that pertains to semester and section number.

Concentrations vs. Focus Areas

EE concentrations

- Biomedical Applications
- Environmental Applications
- Photonics
- Enterprise

CpE concentration

- Enterprise

1. Get appropriate flowchart
2. See Judy or Trever, EERC 131 for questions
3. Complete Curriculum Add/ Drop form to add a concentration
4. Concentration is listed on the Diploma

Focus Areas: (area of specialty)

Power and Energy

Control

Signal processing

Photonics

Electromagnetics

Electronics

Communication

Embedded systems

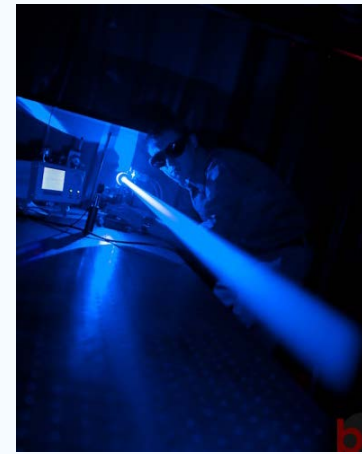
- Mix and match
- Not listed on diploma
- Highlight on resume

EE's = EE Electives

CpE's = CpE Technical Electives

Interested in Photonics?

- EE majors can earn a concentration in Photonics
- Join SPIE to be more informed and involved
- Take Introduction to Geometric and Wave Optics in semester 5 (fall of 3rd year)
- If you decide to pursue the concentration
 - Follow EE – Photonics flowchart
 - Different set of required courses
 - Same total number of credits (128)

The SPIE logo consists of the letters 'SPIE' in a bold, black, sans-serif font, centered within a light gray square background.

Student org
EERC SB 24

The photonics area deals with controlling light energy.

- Robotic sensing and vision
- Medical imaging and instrumentation
- Outer Space photography
- Sensing and communication

Dr. Chris Middlebrook, EERC 623
Dr. Durdu Guney, EERC 729
Dr. Mike Roggemann, EERC 503

Accelerated Masters Program

- MS Electrical Engineering
- MS Computer Engineering
- Apply after completion of junior year core
- Maintain minimum cumulative GPA of 3.25
- Double-count 3 to 6 undergraduate credits toward a masters in The ECE Department.

More to Think About

- Undergraduate Research
- Study Abroad – many countries
200 Admin Building
Tuesdays at 11am Thursdays at 2pm
- Career Center offers: 220 Admin Building
 - Career and interest explorations MyPlan
 - **Co-op experience** - suggested after Circuits I or II
 - UN2525 Career Development class 1 cr.
- MBA in one year after BS – see MBA advisor early on
- **ACTION!** Use your Canvas Advising Course checklist



Career Fairs:

Sept. 29

Feb. 23

Industry Days:

Check Career Services website

Find requirements on **Degree Services** website for:

- **Minor**
- **Double major (takes less than 32 credits to complete 2nd major)**
 - CpE and EE
 - CpE and CS
- **Second Bachelaurate Degree (32 or more credits needed to complete 2nd degree)**
 - EE and MEEM
 - EE and Bio-medical Engineering
 - Any two majors that takes 32 or more additional credits to complete.

Grades

greek activities

snowboarding



Gaming

What are your priorities?

1. **Class attendance**

favorite sport

2. **homework**

3. **review class material**

4. **studying for exams/ quizzes**

R.A.

movies

5. **Learning Center
Getting help**

friends

parties

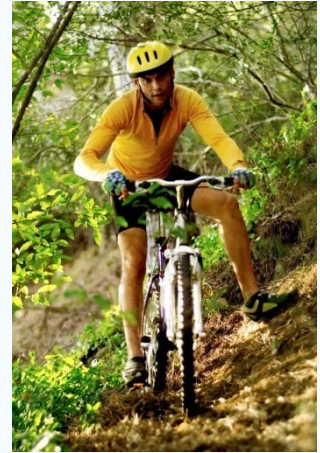
job

broomball

ENTERPRISE

Travel home

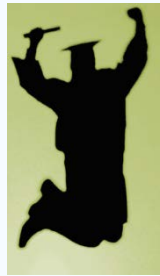
mountain biking



IEEE
NSBE
SWE
HKN
etc...

TAKE THE REIGNS; YOU ARE IN CONTROL OF YOUR OWN SUCCESS

GPA:



1. Cumulative GPA
2. Departmental GPA (min. 16 cr) “EExxxx”
3. Term GPA (or semester GPA)

All 3 GPA's must be at least 2.0 to remain in Good Academic Standing

3.5+ → Graduate with honors

3.0+ → Get job interviews 😊

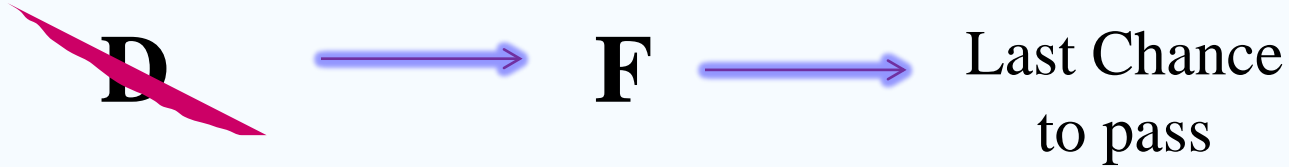
Below **3.0** → May have difficulty finding co-ops/jobs

2.75+ → Eligible for Study Abroad programs

Below **2.0** → **Probation** 😞

2 consecutive semesters on probation leads to suspension.

Midterm grades available online Monday, Oct 19th after 5pm



Course Repeat Rules: (blog post)

1. Courses with CD or less may be repeated.
2. Most recent grade counts, even if lower than prior.
3. No more than three attempts per course.
4. Special permission is required for 3rd and final attempt.

Advice:

1. Do not skimp on a class you are repeating. Go to all your classes and re-do all the homework from the start.
2. Meet with your advisor if you need to raise your GPA and/or are considering repeating a course.

Dean of Students Office**487-2212**Waino Wahtera Success Center - in the Admin Building

If something happens to you, such as a medical or family emergency and it causes you to miss classes, contact the Dean Of Students Office as soon as possible.

If you have a learning Disability and need accommodations, contact Christy Oslund in the Dean of Students Office.

Counseling Services**487-2538**3rd Floor of the Admin Building

If you become overwhelmed, stressed out and stop going to classes or doing homework, we have counseling services to help students deal with stresses that interfere with college work and the enjoyment of life in general.

Quiz

- Official degree audits/requirements? Degree Services
- What tool will you use to track degree progress? Online degree audit
- If you repeat a course, which grade counts, the highest or the most recent? Most recent (even if it's lower) Attempt limit 3
- If you have a crisis that causes you to miss classes, who do you contact? Dean of Students, 487-2212
- If you have an advising question, where can you find the answer? BLOG webpage email Trever or Judy EERC131
- Can you take a course if you failed it's pre-req? NO!
- What is the minimum GPA needed to remain in Good Academic Standing? Cumulative, Semester and Departmental: 2.0
- Which courses are used in Departmental GPA? EE
- What is minimum GPA to graduate with honors? 3.5

Include in your e-mails:

- Student ID Number “**M-number**” (or st 3 digits)
- **Major**
- **First and Last Name**

- ASK your advisor, not your friends: EERC 131

Trever: tjhassel@mtu.edu
Judy: eceadvise@mtu.edu

To schedule an appointment,

Call **487-2550** or go to EERC 121 (Main Office)