Monday
August 24th

Academic Advising

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
**Electrical and Computer Engineering**

**Staying on Track**

**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

**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”
CS1121 Intro to Programming I
CS1131 Accelerated Intro to Programming

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

CS1131 (5) may be taken in lieu of both CS1121 (3) and CS1122 (3).

CS1131 is offered in Fall only.

Ready for sophomore CS courses after CS1122 or CS1131.

EE majors considering a CS minor or CpE or CS major, may take CS1121 (may use in place of CS1111).

Assessment meeting for EE’s: Friday at 2pm
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.
Computer Engineers

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 ½ 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

Remember this
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 HASS 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 HASS list or the HASS restricted list

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 Viguier asviguie@
   German – Karin Schlenker kbschlen@
   Spanish – Leyre Alegre-Figuero lalegref@

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
• 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 8 am (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
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

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.
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 HASS 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 5 pm, 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 + ?HASS 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 jtlukows@mtu.edu
Mr. Bob Page, MEEM 604 rwpage@mtu.edu

WCE (L03) — Wireless Communication

Advisor: Mr. Kit Cischke, EERC 520 cmcischk@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

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

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
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 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.
• 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
More to Think About

Find requirements on Degree Services website for:

- **Minor**

- **Double major** (takes less than 32 credits to complete 2\(^{nd}\) major)
  - CpE and EE
  - CpE and CS

- **Second Bacheloreate Degree** (32 or more credits needed to complete 2\(^{nd}\) degree)
  - EE and MEEM
  - EE and Bio-medical Engineering
  - Any two majors that takes 32 or more additional credits to complete.
You are responsible for your own success.

**What are your priorities?**

1. Class attendance
2. Homework
3. Review class material
4. Studying for exams/ quizzes
5. Learning Center

**E F F O R T**

- Grades
- Greek activities
- Snowboarding
- Gaming
- R.A.
- Movies
- Friends
- Parties
- Travel home
- Broomball
- Enterprise

**Take the reigns; you are in control of your own success.**

GPA: [Blank]
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:

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.
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

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.
• 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 its 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: tjhassell@mtu.edu
  Judy: eceadvise@mtu.edu

To schedule an appointment,
Call 487-2550 or go to EERC 121 (Main Office)