Schedule appointments: 487-2550 & EERC 121

ECE Main Office: Michele Kamppinen EERC 121

Academic Advising Office: EERC 131

Electrical Engineers
Judy Donahue
eceadvise@mtu.edu

Computer Engineers
Trever Hassell
tjhassel@mtu.edu

Important advising sites:
- mtu.edu/ece/undergraduate/advising
- blogs.mtu.edu/jmdonahu/ (ECE advisor BLOG)
- mtu.edu/registrar/students/registration/

First-year Fall Advising Meetings are required
Undergraduate Advising

Advising Reminders

Wednesday, May 24, 2017

- New Rule: CPE majors (& CPE/EE) may not pursue CS nor EE minor.
- CPE majors: Departmental GPA will include EE and CS courses beginning Fall 2017.
- To schedule an advising appt, call 487-2550 or go to EERC121
- Registration for Fall 2017 is OPEN for current students.
- December 2017 graduates: Complete your graduation application
- Spring Advising Meetings: All

Advising Resources

- Computer Engineering
- Electrical Engineering
- Search advising questions
- Photonics Program
- ECE Focus Areas
- Concentrations
- Joining an enterprise
- Dean of Students
- Feeling Stressed, what can I do?
- Change major or add a minor

Quick Links

- Prepare for Registration
- UG Course Catalog
- Special Approval/Restriction Waiver
- Enterprise Design Verification
- Enterprise Project Summary
- Semester Planning Worksheet
- Curriculum Add/Drop Form
Tools for Staying on Track

Following degree requirements

**Catalog Term:**
- based on year you began at Tech
- your catalog term is Fall 2018, coded as "201808"
- Degree requirements are defined by catalog term

**Your Flowchart:**
- Follows requirements for your major and catalog year.
- Sample 4-year plan

**"pdf" degree audit form**
- Official degree requirements document
- Access on Degree Services Website under “Majors”

**Academic Plan:**
- Create your own plan as you progress and make academic and career decisions

**Online Degree Audit report:**
- Review your report each time you schedule or change classes
- Access in Banweb - Student Records
Staying on Track

Canvas Course:
2018 Incoming Electrical and Computer Engineering

• First year key advising information
• Quizzes are really checklist items
• Important items such as:
  • How to register
  • Become familiar with University Policies
  • How to run your Degree Audit Report
  • Etc…
• 2nd year rolls into a Canvas Course which follows the Advising Checklist on the Advising Syllabus

When should I:

Study Abroad? Add a minor?
Take a co-op? Create my resume?
Join Enterprise? Join a student organization?
See an advisor? Apply for graduation?
**Programming courses**

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

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

CS1131 is offered in Fall only

You will be ready for sophomore CS courses after CS1122 or CS1131

CS Knowledge Assessment: online Canvas Survey/Assessment

• You need to take this in order to be placed in CS1121/1131
• [http://www.mtu.edu/cs/undergraduate/placement/](http://www.mtu.edu/cs/undergraduate/placement/)
• Questions contact:
  • Professor Leo Ureel at ureel@mtu.edu or 209 Rekhi

EE majors considering a CS minor or CpE or CS major, may take CS1121 (may use in place of CS1111). Take the CS Knowledge Assessment.
CS1121 / CS1131 : how to succeed
and CS1111 for EE’s

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.
Recommended for CpE’s: May count as:

1) **CH1150/51** University Chemistry I .................. 2\textsuperscript{nd} Discipline Math/Science Elective
2) **ENG1102** Engineering Modeling & Design .... CpE Technical Elective
3) **MA3160** Multivariable Calculus........................ Math/Science Elective

Reasons:
- gives more options; flexibility
- in case you change to another engineering major in the future
- required if you pursue a double-major in EE

These courses fit into the CpE degree as listed above.
CH1000 or CH1150?
Make sure you’re in the right chemistry

MA1030 – College Algebra I – take CH1000

MA1032/1031 – Pre-calculus and Algebra II students
• Take CH1000 – Introductory Chemistry
  • 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 – University Chemistry
  • B or better in H.S. Chemistry and Algebra. Taking CH1153 is strongly recommended

MA1160 or higher:
• Take CH1100 & CH1151. CH1153 strongly recommended.
• Take CH1000 if you never took chemistry
• May switch to CH1000 if desired.

CH1000 does not count toward your major chemistry requirement. 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, today or Tuesday.
Admin Building 1st floor or email schedule@mtu.edu.
Chemistry advisor: Jeremy Brown, Chem-Sci Building room 206A
Honors Physics option

- Honors Physics I: PH1160 and PH1161
  Mechanics (for Physics majors)
- PH1160 and PH1161
- Fall semesters only  *Lecture at 12:05pm MTWF*
- Calculus I (or beyond)
- *see Instructor: Dr. Weidman, Fisher 106*

May replace: PH1100(lab) and PH2100
Electrical & Computer Engineering at Michigan Tech

AP Calculus Score: 3

If you scored 3 on the AP Calculus Exam:

Must earn a grade of C or higher in your placement course:

**MA 2160** (Calculus AB exam)
May enroll in MA 2160, credit for MA 1160 awarded upon earning a grade of "C" or higher in MA 2160

**MA 3160** (Calculus BC exam)
May enroll in MA 3160, credit for MA 1160 and MA 2160 (8 credits) awarded upon earning a grade of "C" or higher in MA 3160

To start in earlier Calculus instead of your placement course,
- Go to Student Services Center to switch your calculus course, this week. 8 am – 5 pm
  Admin Building, or email schedule@mtu.edu

First-year Math advisor: Ann Humes, Fisher 205B

What if CD or D? Must take prior courses or repeat placement course with C or higher the 2nd time.
Success in Calculus leads to Success in Physics

If you earn a grade of C or lower in Calculus I: (MA1160/MA1161), the Physics I Workshop class, PH2110, is recommended.

- **PH2110 – University Physics 1 Workshop**
  - 2 credit active learning, mastery based
  - Integrated with PH2100
  - Take in PH2100 and PH2100 in same semester

- **PH2100 – University Physics I - beginning Fall 2019**
  - Students with grade C in Calc I – strongly encouraged to take PH2110
  - Students with CD or D – required to take PH2110 with PH2100
Linear Algebra and Differential Equations

Accelerated - ½ semester each: MA2321 and MA3521
- 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)
- Recommended if did well in Calculus I and II (B or higher)

Normal Pace - 1 semester each: MA2320 and MA3520
- 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

7 semester prerequisite chain. 8 semesters with normal pace LinAlg/DifEq

MA1160 → MA2160 → MA2321/MA3521 → EE2112 → EE3131 → Sr. Design 1 → Senior Design 2

EE2112 - Circuits II is gateway
1. **12 credits Core Courses:**

   * UN1015 Composition (3)
   * UN1025 Global Issues (3) or 3000+ level language course
   Critical & Creative Thinking course (3)
   Social & Ethical Reasoning course (3)

   * It's important to complete UN1015 and UN1025 in first year or else:
     - low priority registration in 2nd year and beyond
     - unable to schedule upper level HASS/Gen Ed courses until they are both complete

2. **12 credits HASS electives as follows:**

   At least 6 credits of HASS must be upper level (3000+)
   - Communication & Composition HASS list (3) choose one course
   - Humanities & Fine Arts (HU/FA) HASS list (3) choose one course
   - Social & Behavioral Science list (EC/PSY/SS) HASS list (3) choose one course
   - any above HASS list or the restricted HASS list (3) choose one course

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

http://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/
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
     1 level 3000+(3cr)    1 HASS-HU/FA (3cr.)   1 HASS-any (3cr.)

2. Placement credits awarded for ‘B’ grade or higher, in your language placement course.

3. Language Minors: French, German, Spanish (18 – 21 credits)
   Language instructors: French – Maria Bergtrom mjbergst@
                         German – Karin Schlenker kbschlen@
                         Spanish - Leyre Alegre-Figuero lalegref@

4. Language minor advisor: Dr. Maria Bergstrom, Walker 316, mjbergst@mtu.edu

Language Placement questions: TODAY! 3:30 – 5:30pm – Walker 120 A
Electrical & Computer Engineering at Michigan Tech

Part of Term - Track A and Track B

Part of Term ‘1’ = full semester course

Sep 4 – Dec 21

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

Sep 4 - Oct 19

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

Oct 22 – Dec 14

• Many PE or co-curricular courses are offered in either Track A or Track B.

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<td>MW</td>
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• Pay attention to the dates on the schedule of classes.
• Don’t forget to start attending a track B course the week of October 22nd.

EE1110, Essential Math – Track A
EE1111, Intro to ECE – Track B
• **UN1000 – ExSEL Program – ‘Frameworks for Success’**
  • section can be switched if needed  (go to Admin bldg.-Student Services)
  • cannot be dropped
  • See Jeanne Watts if you wish to join ExSEL or email: exsel@mtu.edu

• **UN1010 – Themed Community – ‘Creating your Success’**
  • cannot be dropped or switched

**UN course Questions:**  Ms. Jeanne Watts, 130 Admin
exsel@mtu.edu  487-3558

• **HON1150 - Pavlis Honors College – ‘Creating Your Path’**
  • Pavlis program advising: M&M 722
  • www.mtu.edu/honors
Course Drop Dates check all at Registrar’s Web Site

Last Day to Drop “Without a Grade” recorded:
• Full Term Course – *Friday, September 21*
• Term A course – Wednesday, September 12
• Term B course – Wednesday, October 31

Last Day to Drop – grade of “W” shows on transcript
• Full Term Course - *Friday, November 9*  - WEEK 10
• Term A course – Friday October 5
• Term B course - Friday, November 30

Dean of Students: 906-487-2212 (special circumstances)
First-year student permission to Drop/Add

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Instructor Permission:
- Special Approval
- includes Enterprise enrollment

Class Restriction
- Pre-requisite waiver
- Major Restriction

Full section: see the department which offers course

Bring completed form with appropriate signatures to the Student Services Center in the Admin Building.
Blue Marble Security—BM SE (L02)
Advisor: Dr. Glen Archer, EERC 629 gearcher@mtu.edu

Wireless Communication—WCE (L03)
Advisor: Mr. Kit Cischke, EERC 520 cmcischk@mtu.edu

Robotic Systems—RSE (L15)
Advisor: Dr. Jeremy Bos, EERC 623 jpbos@mtu.edu

First-year enterprise course number: ENT1960, 1 credit for Spring 2019, or take ENT1960 with Calc II if you are currently a precalculus student.

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

• Study Abroad – many countries
  200 Admin Building
  Tuesdays at 11am    Thursdays at 2pm
Study Abroad Fair – Sept. 19th 10am-2pm
  under the Tents near EERC

Career Fairs:
  Oct. 3    and    Feb. 20

Industry Days:
Check Career Services website

• Career Center offers:  220 Admin Building
  • Career and interest explorations  MyPlan
  • Co-op experience - suggested after Circuits I or II or later
  • UN2525 Career Development class 1 cr.
Degree Services website for program requirements:

- **Minor**
  - Remote Sensing, Nanotechnology, Mathematics, Data Acquisition and Industrial Control, Aerospace Engineering, Electronic Materials, Music, Art, Physics, Languages, etc...

- **Double major examples** - if takes less than 32 credits to complete 2\textsuperscript{nd} major.
  - CpE and EE – approx. 19 credits additional
  - CpE and CS – approx. 25 credits additional
  - EEEB and EBE
  - other

- **Second Baccalaureate Degree**
  - EE and Mechanical Engineering
  - If it takes 32 or more additional credits to complete a 2\textsuperscript{nd} major.
Student Organizations

- Join IEEE to be connected to the largest professional society in the world and have access to the Student Projects Lab, room 809

- Join SPIE to be more informed and involved in Photonics activities and research

- NSBE – National Society of Black Engineers

- SWE – Society of Women Engineers

- Eta Kappa Nu (HKN) – IEEE Honors Society - you may be invited to join in Sophomore, Junior or Senior year for earning a high cumulative GPA and are in the top 10, 25 or 33% of your class.

More to Think About

Attend K-Day for information on student orgs
You are responsible for your own

- Read & know your Course Syllabus.
- Go to all your lectures & labs and pay attention. Take notes.
  - root of most academic problems (you don’t want to go there)
- Read emails daily – especially from instructors, advisors, and the Dean of Students Office. Use Canvas messages.
- Make plenty of time for studying and homework. 30-45 hrs
  - Start homework early – DO NOT PROCRASTINATE !!
- Do your own work. Do not copy. Practice, practice, practice!
  - Be able to solve math problems & develop your own code.
  - Practice math problems until you can do them in your sleep.
- If you don’t understand something, ASK and get help right away.
  - Instructor office hours - Learning Centers - NOT from friends
- Use the Learning Centers – weekly appointments or walk-in hours.
  - Sign up early for Math/Chem Learning Center weekly coaching.
- If you think you’re in the wrong level of a course, see your instructor right away – especially for math courses.
- Freshmen year: Check Mid-Term grades online evenings of: fall- Oct 22 & spring- Mar 4
  - Satisfactory (S) or unsatisfactory (UN)
- If something happens to you, contact the Dean of Students 487-2212.
What are your priorities?

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

GPA: ___

Take the reigns; you are in control of your own success.
All 3 GPA’s must be at least 2.0 to remain in Good Academic Standing.

1. Cumulative GPA
2. Departmental GPA (min. 16 cr complete)
   - EE majors: uses EE courses
   - CpE majors: uses EE and CS courses
3. Term GPA (most recent semester GPA)

   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 academic probation leads to suspension.

Midterm grades available online Monday, Oct 22nd 5pm
Course Repeat Rules: (blog post)
1. Courses with CD or less may be repeated.
2. Most recent grade counts.
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’d like 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 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.
• Where are official degree audits/requirements? Degree Services website
  In Banweb: Online degree Audit report

• What tool will you use to track degree progress? Online Degree Audit Report

• 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 Office, 487-2212

• Can you take any Humanities course for General Education? No! Choose courses from HASS lists

• 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 w/16+ cr: 2.0

• Which courses are used in Departmental GPA? EExxx or EE & CS

• What is minimum GPA to graduate with honors? 3.5

• How do I verify that a course will count? Before classes begin
- Be careful if switching sections!
  - loose your cohort group
  - loose your seat.
  - MA, ENG, CH

- First-year Fall Advising Meetings (required)
  EE’s - individual meeting w/ Judy
  CpE’s – group meeting w/Trever

** Bring your advising folder to your academic advising meetings.

- Orientation handouts are available in Canvas & on the ECE Advising webpage
Include in your e-mails:

First and Last Name, major, and M-number or 1st few digits of that.

- 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)

Questions? See us in EERC 131 or e-mail one of us.