First-year Spring Advising Meeting

EE MAJORS

February-March 2017 - Have your flowchart handy

- Prepare for Registration of Fall classes
- Update your flowchart
- Enterprise, minors, co-op, study abroad, etc…

Judy Donahue
EERC 131
eceadvise@mtu.edu

Appointments: 487-2550

See the Slides .pdf version of this presentation to use the relevant links included.
REGISTRATION DATES

- Initial Fall Registration is open March 12 - March 26

- Your Registration Priority Start Date/Time
  - Based on the number of credits you’ve completed.
  - see Registration Priority Schedule. Mark Your Calendars!

- Fall registration closes March 26, then re-opens March 29th and will remain open until fall classes begin.

- Summer registration is open until classes begin
- Summer classes begin and end:
  
  **Track A:** May 8 – June 23  
  **Track B:** June 26 – Aug 11
Choose your courses & Check Prereqs

EE Flowcharts
Advising webpages

Consider:
Normal-paced
Lin Alg & Diff Eq
How to register in Linear Algebra and Differential Equations:

**MA2321 and MA3521 accelerated – both in Fall**

- MA2321 (track A) *is the pre-requisite* for MA3521 (track B)
- Register for **both** CRN's MA2321 and MA3521 else “Link Error”
- Take Linear Algebra & Diff Eq before taking MA3160
- Take at least **14 Credits** if you take accelerated courses

**OR**

**MA2320 (Fall) then MA3520 (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. This delays Circuit II course one semester.
### Sections Found

#### Computer Science

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**LINK ERROR** = missing lab or lecture section (CRN)

L02 R01
Registration Forms for waivers and full sections

Filled Section Form/Late Adds

Web: “Department Contacts for filled sections”

- Look for an open section
- Wait for someone to drop
- Use green form to seek permission from Department which offers course (Judy & Trever cannot get you in)

Special Approval & Restriction Waiver form

- Print waiver form at the Registrar’s webpage
- Take form to instructor for approval
- Take completed, signed form to the Student Services Center – Admin Bldg
- Most enterprises require this form
ENTERPRISE ENROLLMENT

ECE Department Enterprises:

- BMSE – Blue Marble Security **L02**  (Dr. Glen Archer EERC 629)
- HEV - Hybrid Electric Vehicle **L04**  (Bob Page MEEM 604 and John Lukowski EERC 233)
- RSE – Robotic Systems  **L15**  (Dr. Glen Archer EERC 629)
- WCE – Wireless Communication **L03**  (Mr. Kit Cischke EERC 520)

  Aerospace  (Dr. Brad King  MEEM 1014)  application-see their website
  Advanced Metalworks  (Dr. Paul Sanders M&M 202)
  Formula SAE  (Dr. James DeClerck  MEEM 927)
  Supermileage Vehicle  (Mr. Rick Berkey  M&M 722)
  Innovative Global Solutions  (Dr. Warrington  M&M 722)
  Open Source Hardware  (Dr. Joshua Pearce  M&M 504)
  SENSE  (Dr. Andrew Barnard MEEM 930)

Many more....  Visit the enterprise website

- Register in ENT2950 if you have six semester left
- Use ENT1960 if you have 7 semesters left

Web: ECE undergraduate Advising ~  **Joining an Enterprise**  
Many enterprises require “special approval” – use waiver form & obtain enterprise advisor signature
ENTERPRISE ENROLLMENT

Review the Enterprise Course # Registration Guide (at the ECE Advising Page)

ENT course# depends on # semesters you have remaining at Tech.

Join ENT2950 when you are in EE2111 or Diff Eq (6 sems. Left)
Join ENT1960 when you are in MA2160 (7 sems. Left)

Web: ECE undergraduate Advising ~ Joining an Enterprise
Notify 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.

(Michigan undergraduate schools)
Complete a Guest Application – Registrar’s website

Transfer Equivalency List – Look for previously evaluated courses

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

MTU Transfer Services
Student Services Center, Admin 110
487-3323
transfer@mtu.edu
TAKING MA2160 DURING SUMMER?

Take both, MA2160 and EE1110, Essential Math for EE’s during summer:

- EE1110 - Remotely – through Michigan Tech Track B
  June 26 – August 11  Prerequisite is MA1160/1161
- MA2160 – at community college or Michigan Tech

Why? So you can take EE2111, Circuits I in Fall. Both MA2160 and EE1110 are prerequisites for EE2111, Circuits I.

Other summer course suggestions (if you have time):
  Linear Algebra
  Multi-variable calculus
  University Chemistry
  University Physics
  General education course – ensure it is one that you need.
REGISTRATION NOTES:

- EE’s: Do not postpone CS1111. **CS1111 is a fall only class.**
  - Choose a lab section and the lecture section – enter both CRN’s to avoid a “Link Error”

- Decide if you’d like accelerated Linear Algebra and Diff EQ in fall, or to split them into two semesters at the normal pace.

- Schedule at least 14 credits with MA2321 & MA3521. (financial aid safety net)

- ENG1100 students will take ENG1102 in fall.

- You can take either a Critical & Creative Thinking course or a Social Responsibility & Ethical reasoning course, or both. If you did not complete UN1015 or UN1025, take in summer or fall, before taking other gen ed courses.

- Following the flowchart will have the least chance of time conflicts.

- Notify transfer@mtu.edu if you are taking a course elsewhere in summer that is a prerequisite for a class you need in fall.
BSEE CONCENTRATIONS

- **Biomedical Applications**
  - Take BL2010 and BE2400 in Fall of 2nd year; Take BL2020 in Spring of 2nd year.
  - Can delay one year

- **Environmental Applications**
  - Take ENVE3501 in Fall of 3rd year and ENVE3502 in Spring of 3rd year.

- **Enterprise**
  - Take ENT2961 in semester 3 or 5 and ENT2962 in semester 4 or 6.
  - Choose Enterprise project work for your Engineering Design Option. Take ENT3950 in Sem.

- **Photonics**
  - Complete PH2200, EE2112, MA3160 and (MA3520 or MA3521) in 2nd year
  - Take EE3090 in fall of 3rd year

- **Electric Power Engineering – New for 2017-2018**
  - Change catalog year to 2017-18 (do this in 2nd year or later)
  - Take EE3120 in semester 4, 5 or 6.

To “Add” a concentration, complete a [Curriculum Add/Drop form](#) and meet with Judy. Obtain a sample flowchart for the concentration you are considering.

Find appropriate flowchart on EE advising page.

Students using Catalog Year 2016 - 2017
INTERESTED IN PHOTONICS?

**Photonics flowchart**

**EE 3090** Geometrical and Wave Optics
- Fall of 3rd year
- Concurrent prereq: EE3140 - Electromagnetics
- Prereqs: PH2200, Diff EQ and MA3160

- If NOT doing the concentration, Geometrical & Wave Optics may apply as
  - “EE Elective credit” or “Approved elective credit” or “free electives”
- Join SPIE – Student chapter of the International Society of Optics and Photonics
  - activities and research – email Derek Burrell at djburrel@mtu.edu
MINORS

Search for [Minor requirements](#) on Degree Services website

Fall 2016 and later: Minor coursework may double-count with major requirements.

**Technical**
- Aerospace Engineering
- Computer Science
- Electronic Materials
- Mathematics
- Nanoscale Science & Engineering
- Physics
- Data Acquisition and Industrial Control

**Non-technical**
- Art
- Economics
- Enterprise
- Ethics and Philosophy
- French, German, or Spanish
- Music
- Theatre Arts
- Writing

ECE Advising Blog

Degree Services plus many more minors
Complete a **Curriculum Add/Drop Form** with the advisor in department offering the minor, concentration, etc...

**Add:**
- minor
- concentration
- double-major
- second degree

**Change:** major

**Drop:**
- minor
- concentration
- double-major
- second degree

A degree audit report in Banweb will be generated accordingly.
Use your degree audit report to verify your course choices

Do not take courses that are not on the Core or HASS lists.

2nd year Core- Critical & Creative Thinking (3 cr.) Select one course from:
- FA2330, FA2520, FA2720, FA2820, HU2130, HU2503, HU2504, HU2538, HU2700, HU2820, HU2910, SS2300

2nd year Core- Social Responsibility & Ethical Reasoning (3 cr.) Select one course from:
- EC2001, PSY2000, SS2100, SS2200, SS2400, SS2500-SS2505, SS2600, SS2610, SS2700

3rd & 4th year: 12 credits HASS: at least 6 credits of HASS coursework must be level 3000-4999. See HASS lists on the web and in your Banweb degree audit report.
- HASS Communication & Composition list, 3 cr.
- HASS Humanities and Fine Arts (HU/FA) list, 3 cr.
- HASS Social & Behavioral Science (EC/PSY/SS), list 3cr.
- HASS any or HASS restricted list, 3 cr.

3 units of Co-curricular courses (physical education)
REPEATING A COURSE
GRADE OF “CD” OR LESS.

- Students may repeat courses with a grade of CD or lower.
- The most recent grade is used in your GPA calculation. Even if it is lower.
- Maximum of 3 attempts to pass a course.
- Special permission from the Dean of Students, Financial Aid and your academic advisor is required to repeat a course a 2nd and final time.
- If you are behind or not doing well in a course, talk with your instructor and then your academic advisor.
- Friday March 24th is the final day to drop a course with a “W” grade.

Web: ECE Advising Blog
SPRING SEMESTER       DROP A COURSE

First–year students: instructor and advisor signatures required. Use the orange Add/Drop form.

Friday MARCH 24th, is last day to drop with a grade of “W”.

After March 24th, no dropping is allowed for low grades. Permission from Dean of Students is required if you had extenuating circumstances beyond your control. Call 487-2212.

Track B Classes begin Monday, Feb 27th.

- March 15 is deadline to drop Term B courses without a grade.
- April 7 is deadline to drop Term B courses with a “W” grade.
- After April 7th, no dropping of Term B courses, except in extenuating circumstances.

Get orange drop form in EERC 121 or 131.
CO-OP

- **Bookmark** this page: Career Services
- **Valuable** experience to add to your resume
- Helps with **career path** and **specialty area** planning
- **Co-op** – go to the Career Services Center for co-op opportunities and how to apply. Admin Building 2nd floor
- **UN3002** – 2 credits co-op experience (not required)
  - EE majors: co-op credits may count as free or approved electives
  - CpE majors: co-op credits may apply as free electives if needed
- **Ms. Kirsti Arko**, karko@mtu.edu 487-2313 Admin 220
IPS Office – International Programs and Services
  • www.mtu.edu/international

• Study Abroad 101 workshops:
  11 am Tuesdays
  2 pm Thursdays
  (Just walk in – no appointment needed -200 Admin)

• Fall, Spring & Summer programs
• Apply in sophomore year
• EE Junior Year Spring in France – core classes
• European Project Semester (EPS)
  - senior design project (earn credit for EE3901, EE4901, EE4910)
ACCELERATED MASTERS - MSEE, MSCPE
“5-YEAR MASTERS”

✓ Possible to complete BSEE & MSEE or BSCpE and MSCpE in 5 years.

✓ 6 credits of 4000+ level ECE coursework may be applied to MSEE or MSCpE.

✓ Remaining 24 credits may be completed in one year.

✓ Apply at end of Junior year

✓ Maintain undergrad cumulative GPA of 3.25 +

CONSIDERING AN MBA?

Contact the MBA program administrator at techmba@mtu.edu or 906-487-3055 for information about program prerequisites and admission into the Tech MBA program.
ECE LEARNING CENTER   EERC 123

- Coaching hours posted in [ECE Advisor’s blog](#)
- Help with EE1110, EE2174, EE2111, EE2112, math and programming skills
- See your instructors for help during their office hours
- Most departments have a Learning Center
- Multi-literacy Center - Walker 107 – help with writing and communication for any class.

Sunday – Thursday  6:00 – 8:00 pm

Monday – Thursday  1:00 – 4:00 pm
“Bad planning on your part does not constitute an emergency on my part”
Anonymous (Proverb)