

# Mechanical Engineering

First Year Student  
Advising Meeting  
March 15, 2011

Department of Mechanical Engineering -  
Engineering Mechanics

**“prepare engineering students for  
successful careers.”**

## **ME Academic Advisors**

Danise Jarvey

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

B.S.M.E.

M.S.O.M.

Ryan Towles

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

B.S.E.

## Advising Office Hours

8am – 5pm (Monday - Friday)  
(open until 4pm in the summer)

204A/205A (203) ME-EM  
906.487.2564

walk-in or by appointment

<http://www.me.mtu.edu/advising.htm>

# Academic advisor's role

Assist students with:

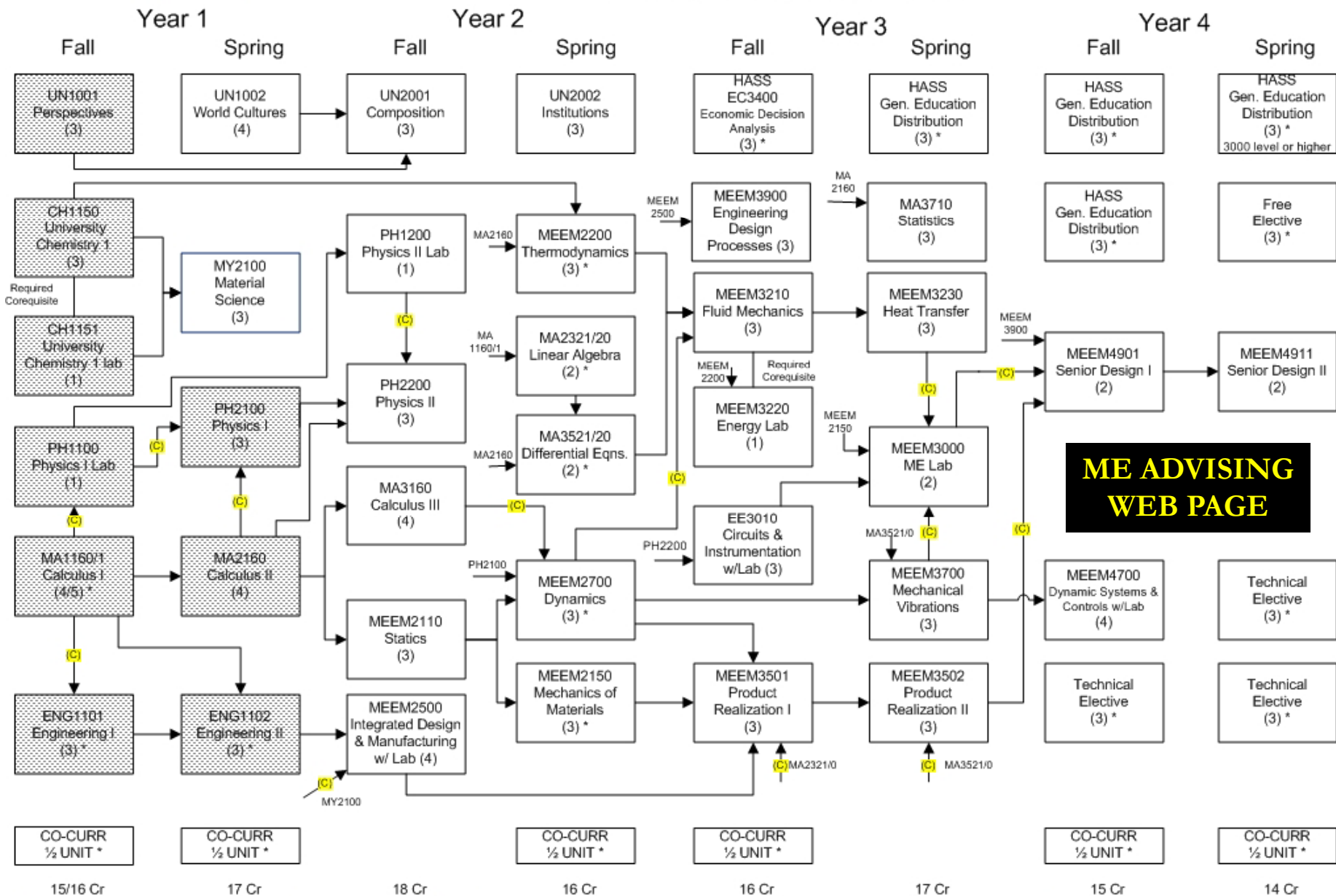
- developing an educational plan
- course scheduling
- interpreting University policies and procedures
- seeking out services as needed
- co-op and study abroad opportunities
- clarification of career and life goals

Your ***education*** is more than just the courses you have to take to get a mechanical engineering degree at Michigan Tech.

## Enhance Your Education

- Senior design
- Enterprise
- Co-ops/internships
- Minors/certificates
- Study abroad
- Undergraduate research
- Extra-curricular activities

## Bachelor of Science-Mechanical Engineering Academic Year 2009-2010





# Senior Capstone Design

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**Capstone**

Michigan Technological University  
Houghton, Michigan

**MichiganTech** Create the Future



## Senior Capstone Design

- Senior Year (4 credits)
- Two semesters (fall and spring cohorts)
- Internship /Co-op integration
- Bring your own project (scholarship possible)
- Fall: ~24 projects
- Spring: ~12 projects



**Bob De Jonge**

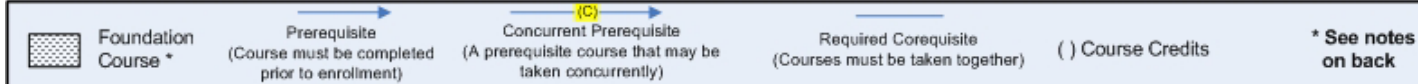
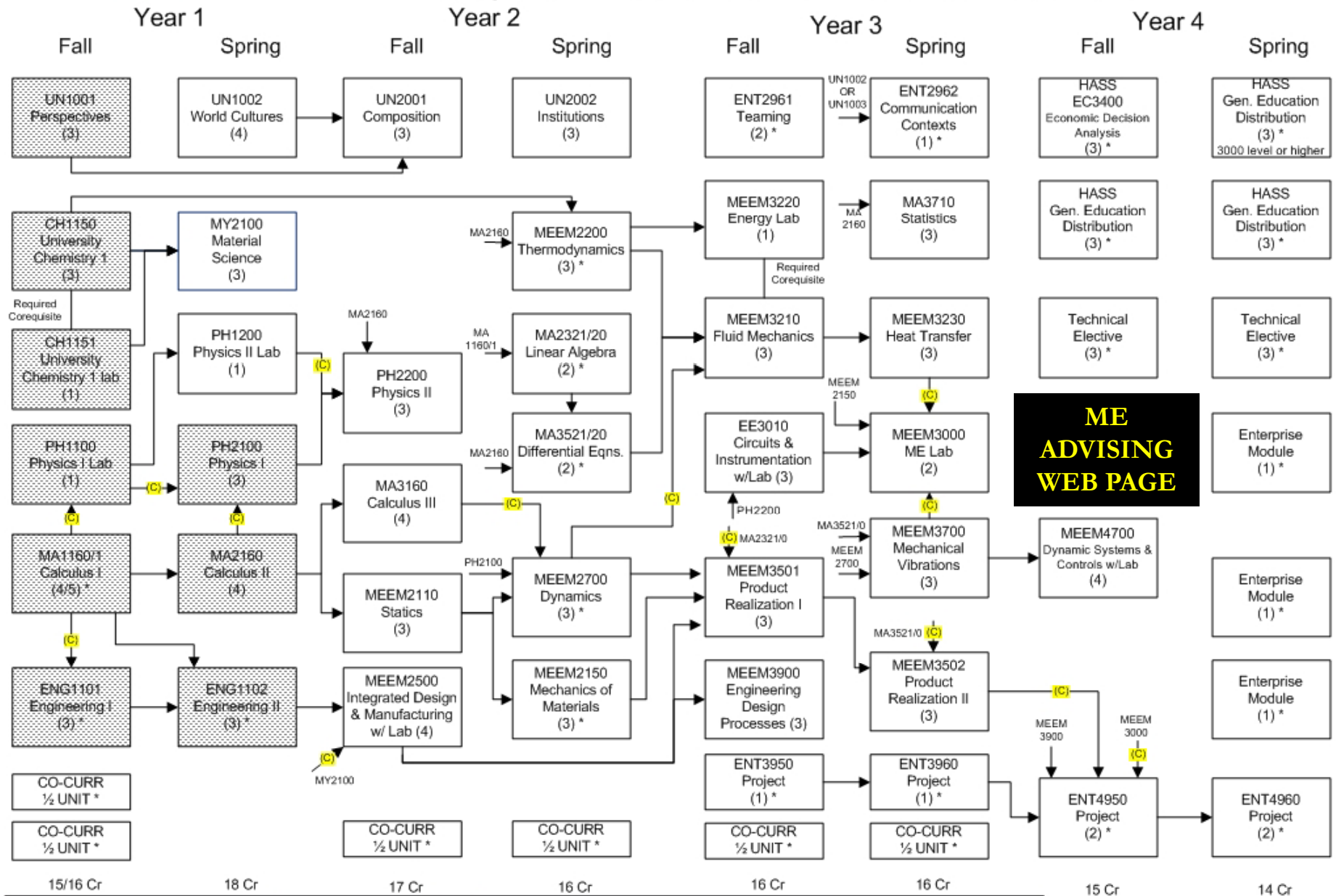
**207 ME-EM**

**[rdejonge@mtu.edu](mailto:rdejonge@mtu.edu)**

**906.487.2142**

**[http://www.me.mtu.edu/senior\\_design\\_show/index.html](http://www.me.mtu.edu/senior_design_show/index.html)**

## Bachelor of Science-Mechanical Engineering Enterprise Concentration Academic Year 2009-2010





# The Enterprise Program

## Michigan Technological University



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# Today's Topics

- What is Enterprise?
- How Does it Work?
- Teams and Recent Highlights
- Why Join?
- How to Get Started
- Student & Industry Testimonials
- Q&A

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# Enterprise Mission

The Enterprise Program provides its students with an opportunity to develop their **technical, business** and **interpersonal** skills through **application** of their knowledge and interests to industry-sponsored, **multi-disciplinary team-based projects**.

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# Program Objectives

- Allow students to experience working in a **diverse environment** – diversity in education, language, major, culture, thinking style and personality type as well as gender and ethnicity
- Facilitate **transition** from undergraduate student to professional work force and provide opportunities to develop leadership and entrepreneurial skills
- Give students **ownership** of a portion of their education that connects strongly to their career goals
- Give students a taste of **rewards and accountability** associated with creating new products and working with paying clients
- Utilize the students fundamental background in science and engineering in the context of solving problems where **non-technical issues** (i.e. cost, societal impacts, etc.) are of equal importance.

# How Does it Work?

- Students elect to join one of the existing Enterprises or help start their own Enterprise (starting as early as the Spring of the freshman year)
- Multi-disciplinary Enterprise Teams work to address problems of significance to Industry, Government and Community, operating in a business-like environment
- Members of an Enterprise Team work together to:
  - solve real-world industry problems
  - design, prototype, test, and manufacture
  - manage multiple projects
  - manage to a budget and schedule
  - develop business and marketing plans
  - recruit, “hire” and train new student “employees”

# Enterprise Curriculum

**Enterprise Project Work** (6-7 credits total) under the guidance of a faculty advisor from the Enterprise's host department

- 1-2 credits per semester over 2-3 years

**Professional Development Modules** (6-13 credits total) many of which are taught by faculty outside engineering and in a non-traditional format (6-13 credits total)

- 1-credit courses in business, communications and special engineering topics
- 3-credit options exist for several topics



# How Do I Participate in Enterprise?

The Program has two levels of participation across the entire campus:

- **12 credit Concentration** presently available in each engineering program and in most non-engineering programs
  - 6 credits of project work
  - 3 credits of modules in Teaming and Communications
  - 3 credits of elective professional development courses
  
- **20 credit Minor** in Enterprise presently available to all majors
  - 6-7 credits of project work
  - 3 credits of modules in Teaming and Communications
  - 5 credits of modules in Business related topics
  - 5-6 credits of elective professional development courses



## Who Can Join?

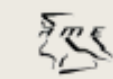
- Motivated and hard-working undergraduates of **any major** can participate in Enterprise
- **First through Fifth-year students** can enroll in Enterprise courses

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enterprise program

# Enterprise Teams



**Advanced Metalworks**—  
machining and casting, product  
and technology development,  
and sales



**Aerospace**—satellite and other  
aero-based projects



**Alternative Fuels Group**—  
alternative fuels for industrial  
and commercial applications



**AquaTerraTech**—ground  
water evaluation and planning



**Automotive Computing**—  
custom hardware/software  
interfaces to automotive  
controller area networks; plug-  
in electric vehicle development



**Blue Marble Security**—  
homeland security  
technologies



**BoardSport Technologies**—  
innovative boarding products,  
materials, and processes



**Cin/Optic Media**—full-service  
digital video production



**Clean Snowmobile Challenge**  
—noise/emissions reduction



**Consumer Products  
Manufacturing**—disposable  
consumer products



**EcoCAR**—vehicle fuel economy  
and emissions competition



**Energy Through Engineering  
and Construction**—low-cost,  
energy-efficient construction  
solutions



**Forest and Environmental  
Resource Management**—  
forest conservation and  
management



**FIRST Robotics**—robotic  
manufacturing technology and  
competition



**Formula SAE Car**—Indy-  
style race car design and  
competition



**Green Campus**—measuring  
and mitigating Michigan  
Tech's carbon footprint



**Husky Game  
Development**—gaming  
products and technologies



**Integrated Microsystems**  
—wireless integrated  
microsystem technologies



**International Business  
Ventures**—business  
development services with  
international collaboration



**ITOXygen**—internet-based  
solutions for technical  
education



**Mini-Baja SAE**—vehicle design  
and competition



**Nanotech Innovations**—  
nanotechnology-related  
products and education



**NVH**—noise and vibration  
reduction for industry



**PDCM**—pavement design,  
materials development, and  
construction



## TEAMS

**Professional  
Communication Arts**

**Professional Communication  
Arts**—creative design and  
communication solutions



**Supermileage Systems**—  
design and manufacture a  
high-mileage competition  
vehicle



**Velovations**—bicycle product  
design and processes



**Wireless Communication**—  
wireless communications,  
hardware and software  
development

700+ students...28 Teams...Something for Everyone!

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# Recent Enterprise Highlights

Michigan Tech Takes a Silver in 2010 Clean Snowmobile Challenge



Aerospace Enterprise Winning Satellite to Be Launched into Orbit



Michigan Tech Receives Iron Team Award in 2009 Baja SAE, Best Design in 2010



SAE Formula Car Wins mySAE Video Contest



Enterprise Program Makes Large Appearance in the Cherry Royale Parade at the National Cherry Festival in Traverse City, MI



Supermileage Systems takes 2<sup>nd</sup> place with 1,140 mpg and wins Best Design at 2009 SAE Supermileage



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# Where Will I Work?

- Office and Conference areas
- High-Bay Fabrication area
- Machine Shop
- Research Labs
- In the Field



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# What's In It for Me?

- Design and build cool things - multi-year, hands-on, team-based project experience
- Practice different roles – engineering, marketing, leadership, financial, recruiting, etc.
- Develop valuable skills employers seek
- Network with industry sponsors
- Differentiate yourself from the pack!

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# Building your Resume...

## EDUCATION

Michigan Technological University; Houghton, MI  
B.S. in Mechanical Engineering, May 2004  
Cumulative GPA of 3.95

## WORK EXPERIENCE

*Crystal Cool Ice Co., Muskegon Heights, MI*  
Ice Man 1999-2003  
Obtained Commercial Driver License  
Delivered ice, bagged ice and unloaded semis  
Trained new employees

*Fruitport Middle School; Fruitport, MI*  
Asst Wrestling Coach 2001-2002  
Coached and motivated athletes  
Administered first aid

## EDUCATION

Michigan Technological University, Houghton, MI  
B. S. in Electrical Engineering, CS Minor, Fall 2003  
Cumulative G.P.A of 3.36  
Recipient MTU Ambassador Student Scholarship  
for exceptional academic achievement

## WORK EXPERIENCE

*Wireless Communication Enterprise, MTU*  
Project Engineer January 2002-Present  
**Programmed** a chip for a wireless snow alarm  
As project manager, **managed** relations  
with industry, enterprise staff and team  
**Built** a communicating transmitter and receiver  
**Designed** an RF amplifier and Butterworth filter  
Served as Financial Manager, **responsible** for  
project accounting and procurement

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# Networking with Industry...

## ■ PARTNERS

3M ■ ArcelorMittal ■ Chrysler ■ DENSO North America Foundation ■ Dow Foundation ■ Emphasys Computing Solutions ■ Ford ■ General Dynamics Land Systems ■ General Motors ■ Marquette General Health Systems ■ McAllister Foundation ■ Robert Bosch ■ Terex Handlers ■ Thompson Scholars Program ■ Volvo Construction Equipment

## ■ SPONSORS

National Science Foundation ■ Thrivent Financial ■ Robert Carnahan ■ Army Research Lab ■ Big Powderhorn Lodging Association ■ Dow Automotive ■ Low Noise Floor ■ Mercury Marine ■ Samsung ■ GE Aviation ■ Kimberly-Clark ■ Cliffs Natural Resources ■ Toyota Technical Center ■ Environmental Protection Agency ■ Bechtel ■ Keweenaw Bay Indian Community ■ MDOT ■ Society of Manufacturing Engineers ■ Guidant ■ Boston Scientific ■ Norsk-Hydro ■ Sun Microsystems ■ Mercury Marine ■ Delphi Automotive ■ National Center for Manufacturing Sciences ■ TRW ■ T<sup>2</sup> Communications ■ SBC Ameritech ■ John Deere ■ TACOM ■ Visteon ■ Alwin Manufacturing ■ American Electric Power ■ NCIIA ■ Eastern Alloys ■ ThyssenKrupp ■ Cummins ■ Superior Controls ■ Anchor Coupling ■ Rockwell Collins ■ Everett Industries ■ Microporous Products ■ USG Interiors ■ Caterpillar ■ Aaron K. Ellison ■ Roehl Transport ■ Superior Diesel ■ Patrick Eddy ■ V.I.O. ■ American Axle and Manufacturing ■ Richard and Stasia Gray ■ Winsert ■ Oshkosh Corporation ■ BAE Systems ■ Altair Engineering ■ Copper Country Intermediate School District ■ Bartmann Brothers Construction ■ Heyer America ■ Keystone Healthcare ■ Dean and Sally Heidtke ■ Fulton Innovations ■ Alcoa ■ Polaris ■ Mitsubishi Electric ■ Trijicon





# The Students' Perspective

"I think joining the WCE **was the best decision I made as an undergraduate**. The scope of the enterprise is astonishing. My skills now range from design engineering and project management to technical writing and documentation. I have interacted with many other incoming graduates from other universities and no university has any program that even closely resembles ours."  
~Enterprise Alum

"While on co-op, I easily transitioned from the world of academia to the world of "Corporate America" largely in part due to my enterprise experience. My hiring manager at The Dow Chemical Company informed me that **he extended a job offer because of my enterprise experience.**"  
~CPM Team Leader

"Every college graduate takes basically the same courses. **In an interview, my distinguishing characteristic is never my grade point average, it's always my Enterprise experience.** Employers are pleasantly surprised to learn that not only have I just completed an engineering degree, but I was effectively working as a real engineer for most of that time."  
~WCE Team Leader

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# Industry's Perspective

"Today's work environment is about team work, communication and working with the public. The Enterprise program at MTU combines all these skills and better prepares students for entering the professional workforce. **It is one of the most impressive programs that I have seen in all my travels to Universities across the country.**"

~Patricia Galloway, CEO, Nielsen-Wurster Group

"The skills and attitudes that are targeted by the Enterprise concept, such as leadership, communication, teamwork, and motivation for lifelong learning, have been successfully learned by the students, and **now they are budding "superstars" for the companies that have hired them.**"

~Richard Anderson, Principal Engineer, SOMAT, Inc.

"I believe that the Michigan Tech **Enterprise is a leading program in preparing students** with leadership skills, attitudes, and valuable insights to enable rapid personal and professional excellence and to thrive in the fast paced, rapidly changing environment that is facing all U.S. industry."

~ Randy Hill, VP of Product & Technology  
Kimberly-Clark Corporation

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# How Do I Get Started?

- **Choose an Enterprise Team** – attend Enterprise team meetings, recruiting events, visit their websites, talk to peers...multiple ways to find out which teams match your interests
- Check with your **academic advisor** to determine how Enterprise fits with your major/curriculum
- Some teams require submitting a resume and **meeting with the advisor** before getting approval to join (like a job interview)
- Enroll in the **appropriate section** of the project course...
  - First-year Spring – ENT1960 Lxx
  - Second-year Fall – ENT2950 Lxx and/or ENT2961 (Teaming)
  - Third year ENT3950 Lxx



# Where Can I Find out More About Enterprise?

## For More Info on...

Enterprise Teams  
Faculty Advisors  
Curriculum and Courses

[www.enterprise.mtu.edu](http://www.enterprise.mtu.edu)

-or-

Contact the Program Director – [mraber@mtu.edu](mailto:mraber@mtu.edu)

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# The Enterprise Program

# Questions ???

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# Cooperative Education:

Hands-on Experience for  
A Head Start on Your Career

First Year Mechanical Engineering Students  
Spring 2011



## What Is a Co-op?

- Academic program (UN3002)=2 credits
- A collaborative relationship between a student, an employer, and the University
- Gain paid, career-related experience



# Co-ops and Internships

## Co-ops:

- Semester assignments  
Fall and/or Spring
- Paid
- For academic credit
- Career-related, hands-on experience

## Internships:

- Usually summers only
- Not always paid (rare)
- No academic credit
- May not be directly related to career



## Who's Eligible to Participate in a Co-op?

- Good social & academic standing (2.2 GPA) in addition to the following:
- Must have completed freshman year (29 credits)
- International students must have completed 2 consecutive semesters in the U.S.
- Transfer students must have completed one semester at MTU



## Create the Future

- 2009-2010 sophomores \$13.61/hour



## Registration Benefits

- Active, full-time student

**NOTE:**

Financial Aid will NOT cover co-op credits in most cases

- Maintain health insurance under parent/guardian

**NOTE:** Federal Health Care Legislation needs to be interpreted on a case-by-case basis, check with your family's health care provider for details

- Student Loan deferment



## Disadvantages of a Co-op

- 4 ½ to 5 years to complete degree
- Social disruption
- Housing contracts





## Obtaining A Co-op

- Competitive Process
- Get resume/interview assistance at Career Services
- Upload your resume and cover letter, and search for co-op opportunities on NACElink or company websites
- Apply to opportunities
- Interview with companies on campus, or make your own contacts



# Companies Hiring Co-ops/Interns

92 Companies at 2010 Fall Career Fair

67 Companies at 2011 Spring Career Fair

- Continental
- Dow Chemical Co.
- G.E. Aviation
- Greenheck Fan
- Grain Processing Corp
- Caterpillar
- Denso
- Bechtel
- Toyota
- Kohler Company
- NUCOR
- Ford Motor Co.
- Union Pacific
- General Motors
- Bemis
- BAE Systems
- ArcelorMittal
- Kimberly-Clark



## For More Information

Visit the Co-op web pages at

<http://www.career.mtu.edu/coop.php>

Learn more about:

- Co-op checklist and process for registering
- Beginning Your Co-op
- Responsibilities during your co-op
- Responsibilities after your co-op
- Frequently Asked Questions



## Co-op student quotes

"As a past sophomore co-op myself, starting earlier has made my entire college education career driven rather than academically driven." ~ Michael Rukamp, ME undergrad

"As some students look forward to beginning their career after graduation, I felt as if I have already started mine."

~ Darrin Traczyk, ME undergrad

# Co-op Education

Jeff Kangas

Career Services

2<sup>nd</sup> Floor - Meese Center

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

<http://www.career.mtu.edu/coop.php>



## Minors/certificates

- Economics (Business)
- Hybrid Electric Vehicle (COE) - Handout
- Mathematical Studies (Mathematics)
- Manufacturing (ME-EM) - Handout
- Modern Languages (Humanities)
  - Minor or certificate – French/German/Spanish
  - International language minors (study abroad)
- Nano-technology (Multi-disciplinary)
- Product Design (ME-EM) - Handout
- Structural Materials (Material Science)
- Technical Theatre (Fine Arts), and more:  
Linked @ <http://www.me.mtu.edu/advising.htm>

# Minors - Advising Contacts

- See advisor in department offering minor or certificate
- Fill out curriculum add/drop form with minor advisor
- Minor audit must be completed before graduation.

# Study Abroad

- Summer
- Academic semester
- European Project Semester



# Study Abroad

Danny Wan

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

International Programs & Services

200 Administration Bldg

<http://www.mtu.edu/international/>

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Create the Future



## Mid-semester grades

- Became available Monday, February 21
- Check on BanWeb
- Grades are:
  - “satisfactory” (‘C’ or better) or
  - “unsatisfactory” (worse than a ‘C’)
- Grades reflect current/projected progress, you can improve!
- ME Advisors have contacted students with 2 or more ‘UN’s or 1 ‘UN’ if already on probation



## Dropping a class

The last day to drop full fall semester classes with a 'W' **was** Friday, March 4 at 5:00 p.m.

The last day to drop track B classes with a "W" grade **is** Friday, April 1 at 5:00 p.m.

All drops must be done in person in the Registrar's office. Drops cannot be done on the web.

**Orange slip – needs to be signed by instructor and advisor for first-year students only**

No late drops will be granted to avoid poor grades.

# Academic Probation

You are on academic probation if your:

- Cumulative GPA is below 2.00, OR
- Most recent semester GPA is below 2.00, OR
- Departmental GPA is below 2.00, based on at least 16 credits.

You are removed from academic probation when your:

- Cumulative GPA is 2.00 or higher, AND
- Most recent semester GPA is 2.00 or higher, AND
- Departmental GPA is 2.00 or higher.

## What is an EnGPA?

- Grade point average based on the first year engineering foundation courses
- Courses included in the EnGPA:
  - CH 1150 (3)
  - CH1151 (1)
  - ENG 1101 (3) or ENG 1001/1100 (4) ,
  - ENG 1102 (3)
  - MA 1160/1161 (4/5), MA 2160 (4)
  - PH 1100 (1), PH 2100 (3)
  - UN 1001 (3)

## ME Milestone

- EnGPA  $\geq 2.75$ , OR
- EnGPA  $\geq 2.50$  and grade  $\geq 2.00$  (C) in MA 1160/1, MA 2160, and PH 2100, and cumulative GPA  $\geq 2.50$

## Calculating EnGPA

<u>course</u>	<u>credits</u>	<u>grade</u>	<u>points</u>	<u>credit points</u>
CH 1150	3	B	3.0	9.0
CH1151	1	B	3.0	3.0
ENG 1101	3	A	4.0	12.0
ENG 1102	3	AB	3.5	10.5
MA 1161	5	BC	2.5	12.5
MA 2160	4	B	3.0	12.0
PH 1100	1	A	4.0	4.0
PH 2100	3	C	2.0	6.0
UN 1001	3	AB	3.5	10.5
<b>Total</b>	<b>26.0</b>			<b>79.5</b>

## Calculating EnGPA

- EnGPA = Total Points/Credits
- EnGPA =  $79.5/26 = 3.06$
- EnGPA Summary/Worksheet @

<http://www.me.mtu.edu/advising/2011/EngPAWorksheetJanuary2011.pdf>



## Time Management

- How has the semester been going?
- How many hours a week have you been studying - 2 hours for each hour in class?
- 15 credits means 15 class hours + 30 study hours or 45 hours minimum per week.
- Work ahead and keep track of your time!
- Study Schedule – Handout
  - <http://www.counseling.mtu.edu/Study%20Schedule.pdf>
  - [www.counseling.mtu.edu/How%20to%20use%20the%20Study%20Schedule.doc](http://www.counseling.mtu.edu/How%20to%20use%20the%20Study%20Schedule.doc)

## Campus Resources – use them!

- Faculty
- Learning Centers (Linked @ <http://www.me.mtu.edu/advising.htm>)
  - Engineering Fundamentals – Dillman B008
- Upper class students
- Resident assistants
- COMPASS (<http://www.mtu.edu/compass/>)
  - ExSEL
- Counseling Services (<http://www.counseling.mtu.edu/>)
- Dean of Students Office (<http://www.mtu.edu/dean/>)
  - Disability Services
- Career Services (<http://www.career.mtu.edu/>)
- Academic Advisors (<http://www.me.mtu.edu/advising.htm>)

## Fall Registration

- What should I register for?
  - See an advisor...
  - Use flowcharts...
  - Schedule of classes – online  
(go to [www.banweb.mtu.edu](http://www.banweb.mtu.edu))
- Registration Priority Schedule
  - <http://www.mtu.edu/registrar/students/registration/prepare/>
- Contacts for filled sections
  - <http://www.me.mtu.edu/advising/2011/FAQ7.html>

Currently in MA 1160/1 & ENG 1100/1101

Sample fall schedule:

– ENG 1102	3
– PH 2100	3
– MA 2160	4
– MY 2100	3
– UN 2001 or UN 2002	3
– Co-curricular/s (optional)	0.5-1.0

Total: 16-17 max.

## Currently in MA 2160 & ENG 1102

Sample fall schedule:

– MEEM 2110	3
– PH 2200	3
– PH1200	1
– MA 3160	4
– MEEM 2500	4
– UN 2001 or UN 2002	3

Total: 18 max.

## Currently in MA 3160 & ENG 1102

Sample fall schedule:

– PH1200	1
– PH 2200	3
– MA 2321/3521	4
– MEEM2110	3
– MY 2100 (if not taken yet) or MEEM2500	3 or 4
– UN 2001 or UN 2002	3
– Co-curricular/s (optional)	0.5-1.0

Total: 18 max.



## **Priority Schedule – Week 1**

<b>Date</b>	<b>Earned credits</b>
Thursday, March 17	Student-athletes and graduate students
Sunday, March 20	126.5 credits or more (10pm) 114 credits or more (11pm)
Monday, March 21	101.5 credits or more (10pm) 90 credits or more (11pm)
Tuesday, March 22	81 credits or more (10pm)
Wednesday, March 23	71.5 credits or more (10pm) 60 credits or more (11pm)
Thursday, March 24	51 credits or more (10pm)
Friday, March 25	43 credits or more (10pm) 30 credits or more (11pm)
Saturday & Sunday, March 26-27	Open to all above groups

## **Priority Schedule – Week 2**

<b>Date</b>	<b>Earned credits</b>
Monday, March 28	18 credits or more (10pm)
Tuesday, March 29	14 credits or more (10pm)
Wednesday, March 30	0 credits or more (10pm)
Thursday, March 31	Non-degree seeking (10pm)
Friday - Sunday, April 1-3	Open to all above groups
Sunday, April 3 – 10 pm	Registration closes
Sunday, April 17	Registration reopens



Priority based on number of credits earned at the time of registration (does not include current enrolled credits unless you have taken track A courses this semester).

Registration begins at 10 pm or 11pm as indicated.  
All registration online.

*Check BanWeb for registration status.*  
*Web registration closed 2-2:30 am daily*

**Contact for ENG courses  
(filled sections, waivers)**

**Amy Monte/AJ Hamlin  
112 Dillman**

**Contact for MA courses  
(filled sections, waivers)**

**Beth Reed**

**205A Fisher**

**[ejreed@mtu.edu](mailto:ejreed@mtu.edu)**

# **Contact for PH courses (filled sections, waivers)**

**PH1100/1200 (labs)**

**Mike Meyer**

**103 Fisher - [mrmeyer@mtu.edu](mailto:mrmeyer@mtu.edu)**

**PH2100/2200 (lectures)**

**John Jaszczak**

**102 Fisher - [jaszczak@mtu.edu](mailto:jaszczak@mtu.edu)**



**Contact for UN 1001/2 & 2002  
(filled sections, waivers)**

**Brad Baltensperger  
204 Academic Offices Bldg.  
[brad@mtu.edu](mailto:brad@mtu.edu)**

**Contact for UN 2001  
(filled sections, waivers)**

**Karla Kitalong  
338 Walker  
kitalong@mtu.edu**

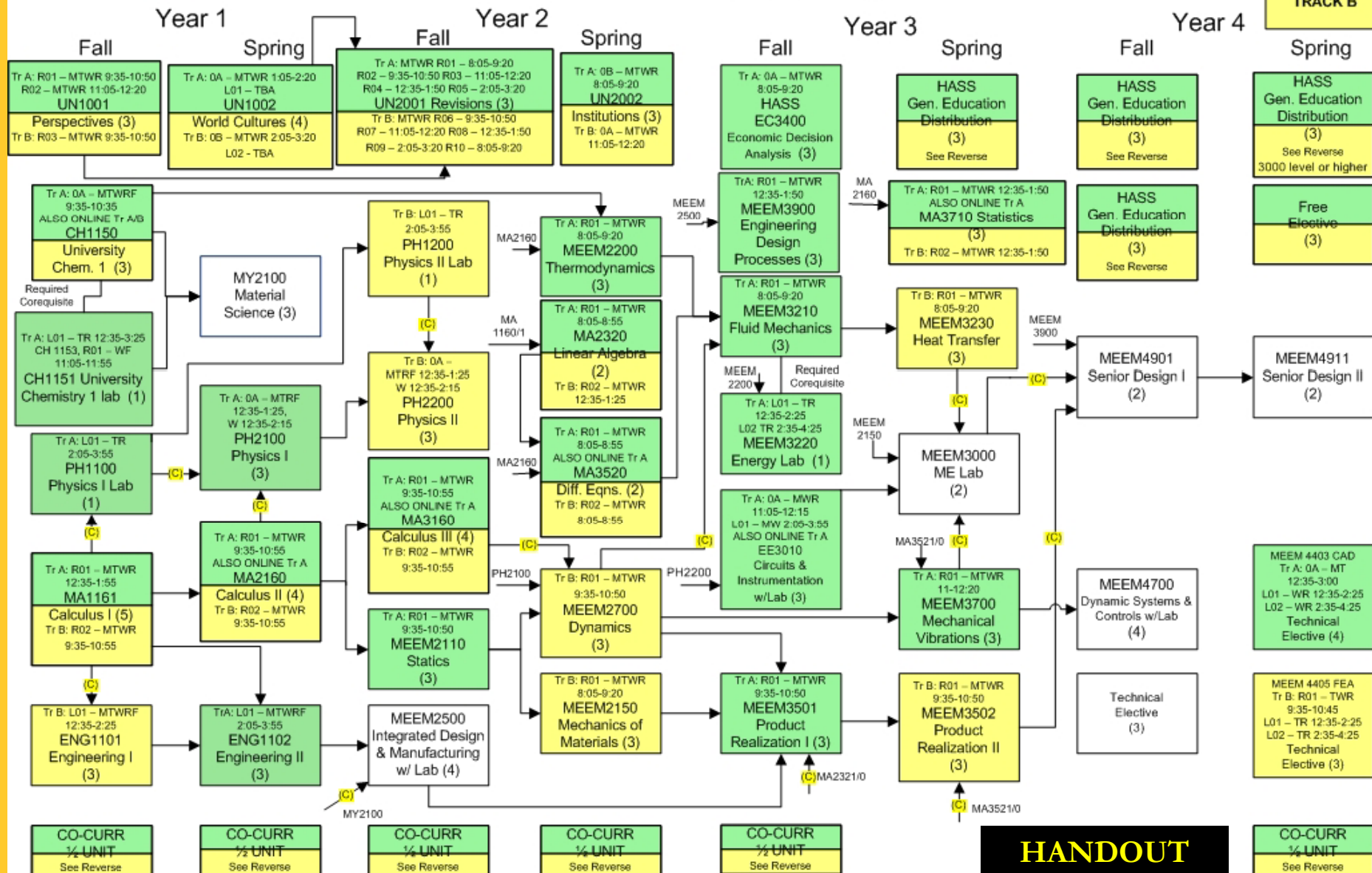
## Summer classes at Tech

- Registration currently open until summer semester begins
- Tracks A and B
- Pace is fast – plan wisely
  - Example: 3 credit class meets 6 hours/week for only 7 weeks. Covers same material as full-semester version.
  - Plan no more than 2 courses per track
- Repeating course w/ 'CD' or lower:
  - New grade replaces prior grade (even if new grade is lower)

## Bachelor of Science-Mechanical Engineering Summer 2011

TRACK A

TRACK B



**HANDOUT**



### Summer Semester 2011 HASS General Education Distribution Offerings

Course (Credits)	Track	Sec	Days	Times	Notes
EC 2001 Principles of Economics (3)	A	0A	MTWR	9:35-10:50	
EC 3001 International Economics (3)	A	0A	MTWR	9:35-10:50	
HU 2271 Level I-A French (3)	A	R01	MTWR	9:35-10:50	
HU 2324 Intro to Film (3)	A	R01	TR	12:35-2:20	
		L01	M	12:35-3:20	
HU 2631 Photography (3)	A	R01	MTWR	11:05-11:55	Creative Endeavors List
		L01	MTWR	12:05-12:25	
HU 2700 Intro to Philosophy (3)	A	R01	MTWR	11:05-12:20	
HU 2820 Communication & Culture (3)	A	R01	MTWR	11:05-12:20	
HU 2830 Intro to Speech Communication (3)	A	R01	MTWR	2:05-3:20	Supplemental List
HU 3120 Technical and Scientific Communication (3)	A	R02	MTWR	9:35-10:50	Supplemental List, Also online Track A
HU 3120 Technical and Scientific Communication (3)	A	R03	MTWR	11:05-12:20	
HU 3120 Technical and Scientific Communication (3)	A	R04	MTWR	12:35-1:50	
HU 3150 Reading and Writing (3)	A	R01	MTWR	12:35-1:50	
HU 3261 Communicating Across Cultures (3)	A	R01	MTWR	11:05-12:20	
HU 3263 German Film (3)	A	R01	MTWR	12:35-1:50	
HU 3502 World Mythologies (3)	A	R01	MTWR	11:05-12:20	
HU 3820 Interpersonal Communication (3)	A	R01	MTWR	12:35-1:50	
HU 4110 Advanced Creative Writing (3)	A	R01			Online
HU 4625 Risk Communication (3)	A	R01	MTWR	2:05-3:20	
PSY 2000 Introduction to Psychology (3)	A	0A	MTWR	11:05-12:20	
PSY 3010 Theories of Personality (3)	A	R01	MTWR	12:35-1:50	
PSY 3720 Social Psychology (3)	A	R01	MTWR	9:35-10:50	
PSY 3850 Human Factors Psychology (3)	A	R01	MTWR	11:05-12:20	Supplemental List
SS 2100 World Peoples & Environments (3)	A	0A	MTWR	9:35-10:50	
SS 2500 The American Experience (3)	A	0A	MTWR	8:05-9:20	
SS 2600 American Government & Politics (3)	A	0A	MTWR	11:05-12:20	
SS 3210 Field Archaeology (var)	A	01	TBA	TBA	Creative Endeavors List
SS 3400 Contemporary Europe (3)	A	0A	MTWR	9:35-10:50	
SS 3510 History of American Technology (3)	A	0A	MTWR	8:05-9:20	
SS 3541 The Copper Country (3)	A	0A	MTWR	12:35-1:50	
SS 3710 Social Problems (3)	A	0A	MTWR	11:05-12:20	
SS 3920 Experimental Archaeology (3)	A	0A	MTWR	11:05-12:20	
SS 3950 American Sports History (3)	A	0A	MTWR	9:35-10:50	
FA 2050 Drawing I (3)	A	R01	MTWR	11:05-11:30	Creative Endeavors List
		L01	MTWR	11:35-12:20	
FA 2080 Presentation Skills (3)	A	R01	MTWR	2:05-3:20	Supplemental List
FA 2112 Acoustic/Electronic Music Composition (3)	A	R01	MTWR	11:05-12:20	
		R01	MTWR	2:05-3:20	Creative Endeavors List
FA 2305 Ceramics I (3)	A	L01	TBA	TBA	
FA 2500 Music Theory I (3)	A	R01	MTWR	8:05-9:20	
FA 2520 Music Appreciation (3)	A	R01			Online
FA 3305 Creative Ceramics (3)	A	R01	TBA	TBA	Creative Endeavors List
		L01	TBA	TBA	
FA 3550 History of Jazz (3)	A	R01	MTWR	9:35-10:50	
FA 3625 History of Rock (3)	A	0A	MTWR	11:05-12:20	
FA 3735 Music, Film, & Theater Sound (3)	A	R01	MTWR	9:35-10:50	

### Summer Semester 2011 Co-Curricular Offerings

Course (Credits)	Track	Sec	Days	Times
PE 0101 Flag Football (1/2)	A	L01	MW	2:05-2:55
PE 0104 Ultimate Frisbee (1/2)	A	L01	TR	12:35-1:25
PE 0106 Beginning Golf (1/2)	A	L01	MW	9:35-10:25
PE 0113 Disc Golf (1/2)	A	L01	TR	11:05-11:55
PE 0118 Beginning Weight Training (1/2)	A	L01	MW	8:05-8:55
PE 0122 Softball (1/2)	A	L01	R	5:05-6:55
PE 0125 Sand Volleyball (1/2)	A	L01	MW	12:35-1:25
PE 0156 Beginning Mountain Biking (1/2)	A	L01	TR	3:05-3:55
PE 0175 Hiking (1/2)	A	L01	TBA	TBA
PE 0175 Hiking (1/2)	A	L02	TBA	TBA
PE 0104 Ultimate Frisbee (1/2)	B	L02	MW	3:05-3:55
PE 0113 Disc Golf (1/2)	B	L02	MW	11:05-11:55
PE 0122 Softball (1/2)	B	L02	R	5:05-6:55
PE 0125 Sand Volleyball (1/2)	B	L02	MW	12:35-1:25
PE 0132 Beginning Soccer (1/2)	B	L01	MW	2:05-2:55
PE 0166 Moving for Fitness (1/2)	B	L01	TR	9:35-10:25
PE 0175 Hiking (1/2)	B	L03	TBA	TBA
PE 0175 Hiking (1/2)	B	L04	TBA	TBA
PE 0206 Intermediate Golf (1/2)	B	L01	T	12:35-2:25
PE 0218 Intermediate Weight Training (1/2)	B	L01	TR	8:05-8:55

EC 3030 Game Theory/Strategic Behavior (3)	B	0A	MTWR	12:35-1:50	
HU 2272 Level I-B French (3)	B	R01	MTWR	9:35-10:50	
HU 2548 Young Adult Literature (3)	B	R01	MTWR	9:35-10:50	
HU 2830 Intro to Speech Communication (3)	B	R02	MTWR	11:05-12:20	Supplemental List
HU 3120 Technical and Scientific Communication (3)	B	R06	MTWR	11:05-12:20	Supplemental List, Also online Track B
HU 3120 Technical and Scientific Communication (3)	B	R07	MTWR	12:35-1:50	
HU 3251 Great Works/German Literature (3)	B	R01			Online
HU 3504 Novels from World Literature (3)	B	R01	MTWR	12:35-1:50	
HU 3545 Literature Across Borders (3)	B	R01			Online
PSY 2000 Introduction to Psychology (3)	B	0B			Online
PSY 3030 Abnormal Psychology (3)	B	R01	MTWR	8:05-9:35	
PSY 3030 Abnormal Psychology (3)	B	R02			Online
SS 2100 World Peoples & Environments (3)	B	0B	MTWR	11:05-12:20	
SS 2500 The American Experience (3)	B	0B	MTWR	9:35-10:50	
SS 3500 Modern American History (3)	B	0A	MTWR	12:35-1:25	
		L01	TBA	TBA	
SS 3512 Building America (3)	B	0A	MTWR	9:35-10:50	
SS 3530 The Automobile in America	B	0A	MTWR	12:35-1:50	

**HANDOUT – SUMMER INFO SUBJECT TO CHANGE. CONSULT LATEST OFFERINGS AT**  
<https://www.banweb.mtu.edu/>

# Transfer credit

- Transfer equivalencies:
  - On-line system or work with Transfer Services staff  
<http://www.mtu.edu/registrar/students/transfer/>
  - Grade of 'C' or higher required to transfer back to Tech
- Attending another Michigan school:
  - See Registrar for guest application
- Repeating courses with 'CD' or lower:
  - Credit transfers if 'C' or higher is earned
  - Prior grade is no longer factored into GPA
- Note: Once you have begun classes on campus at Michigan Tech, UN 1001 and UN 1002 may not be transferred in



# Personal Academic Plan

Things to consider:

- Course load and semester offered
- HASS and Technical electives - Handout
- Certificates and minors
  - All minors require 6 unique credits minimum (3000+ level)
- Additional degree or double major
- Study abroad
- Senior design or Enterprise path
- Co-ops/internships
- Volunteer and extra-curricular activities

See posted information and/or advisors in ME Advising Center to assist you or visit us online: <http://www.me.mtu.edu/advising.htm>

# Why an Academic Plan?

- Plan for your ME career
  - How will you enhance your BSME degree to set you up for the career that you want?
- Required courses to obtain BSME
  - Necessary prerequisites met
  - Desired courses offered in needed semester(s)
  - Graduate when planned
  - Use planning worksheet

# Degree Audit Reporting System(DARS)

Record of progress toward degree and/or program completion

Shows all requirements for degree and which courses are used to satisfy those requirements

Shows all declared curricula (concentrations, minors, 2<sup>nd</sup> degrees, double majors, certificates, etc)

Available in **BanWeb** – Student Services tab  
(<https://www.banweb.mtu.edu/>)

Final confirmation of degree requirements is subject to department and university approval

NOT official documentation of your academic record (official transcript provides this documentation and can be ordered from the Registrar's Office)

## **Major change, double major or second degree?**

- Talk with advisor for additional major/degree
- Fill out curriculum add/drop form with new department advisor
- Changes after first week of a semester go into effect for the next semester

## Résumé

- Prepare two versions of your résumé
- Version one is today with a current objective (to secure an internship or co-op position)
- Version two is what you want it to look like in when you graduate
- Compare the résumés
- Plan how to make version two a reality

- Visit Career Services physically and on the web:
  - Meese Center (Building 84, <http://www.mtu.edu/maps/>)
  - <http://www.career.mtu.edu/>
- Post your current resume on NACElink:  
<http://www.career.mtu.edu/NACElink/>
- Try out My Plan  
<http://www.career.mtu.edu/students/myplan.php>
  - Career Planning on Career Services webpage (see log-in instructions for license number)



# ME Academic Advisors

Danise and Ryan  
ME Advising Center

204A/205A (203) MEEM

<http://www.me.mtu.edu/advising.htm>

**Your education is the sum of  
your college experiences, not  
just the name of your major.**