

# Mechanical Engineering

## “Mechanical Mondays”

Student Professional Work Experience  
(Co-Ops & Internships)

January 23<sup>rd</sup>, 2012

Department of Mechanical Engineering - Engineering Mechanics

## **Mission**

**“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>

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

# Co-op Education

Jeff Kangas, Assistant Director

Career Services

220 Administration Building

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

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

# COOPERATIVE EDUCATION:

Hands-on Experience for  
A Head Start on Your Career

First Year Mechanical Engineering Students  
Spring 2012



# 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





# 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 1/2 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

72 Companies at 2011 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 credits (UN 3002)

- Free elective credits only.
  - Main purpose of credits is to maintain full-time student status, not to fulfill degree requirements.
  - Not usable for technical elective credits (common misconception)
  - Not general education (HASS, etc) credits, even though credits are a UN prefix.
- **May** be used as enterprise module credits for BSME-Enterprise Concentration students
  - To do this, a written justification statement is required from the student, submitted to an ME academic advisor

## 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 a traditional course is normally preferable to online courses (through Tech or other institutions).
  - Transfer credits are GPA neutral
- Attending another Michigan school:
  - Guest application
- Official transcript must be requested and submitted directly back to Tech showing grade(s) to process credit.
  - Contact Transfer Services to enter "In-Session" for courses necessary as pre-reqs for upcoming registration.
- 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

See posted information and/or advisors in ME Advising Center to assist you or visit us online:

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

- Things to consider:
  - Course load and semester offered
  - HASS and Technical electives
  - 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

# 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

# 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:
  - 220 Admin, <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.**