Welcome Back!!!!

New Chemistry Option for Engineering Students

CHEM 151 is a new course being offered for the first time this semester. CHEM 151 is required for Civil Engineering and highly recommended as a substitute for CHEM 131 for mechanical engineering majors. Designed specifically for students of physics and engineering, the course covers topics including stoichiometry, gas laws, phase relations, solutions, electrochemistry, and equilibrium. If you have questions or want more information, contact Professor James Ayers, Associate Professor of Chemistry (jayers@coloradomesa.edu or 970.248.1575.)

Interested in a BS degree in Mechanical or Civil Engineering through the CU-Boulder Engineering Partnership?

There are two ways for current CMU students to be accepted into the CU-Boulder Partnership program:

1. Earn a B or better in two CMU calculus courses and two CMU physical science courses (calculus-based physics and/or college chemistry) with an overall CMU GPA of at least 3.0,
   OR

2. Complete the recommended engineering curriculum for Freshman and Sophomore Years with a combined GPA in these courses not lower than 3.0, and an overall CMU cumulative GPA not lower than 3.0.

If you would like more information about planning your coursework to meet these requirements or you would simply like to learn more about Engineering options at CMU, please schedule an appointment with your faculty advisor.

(Advisor contact information appears on page 6.)

Electives

If you are planning to pursue a BSME or BSCE degree from the CU-Boulder/CMU Engineering Partnership Program, please choose your Humanities and Social Sciences (H&SS) electives carefully. The list of CMU classes that may be used to fulfill H&SS requirements may be found on the CMU Engineering website at http://www.coloradomesa.edu/engineering/documents/HSSAcceptableClasses-August2015Update.pdf. (There are copies available at the AEC front desk and on the AEC 2nd floor bulletin board.) ALSO: always touch base with your faculty advisor as you plan your courses for the next semester. Classes may not always be offered on the schedule your program sheet suggests. Registration for Spring 2017 classes begins on October 31! (Trick or Treat!)
Internships/Part-time Jobs

Western Filament is looking for an intern! They require someone who has strong mechanical aptitude with the ability to process information, accumulate data, and understand and process designs. The intern should be able to interact well with a team of engineers using a hands-on approach to facilitate construction of designs. Previous manufacturing experience would be very helpful but is not necessary. This would be a great opportunity for an aspiring ME to report directly to Western Filament’s Engineering Manager, gaining valuable mechanical engineering experience in a manufacturing environment. The position would most likely warrant a 3rd or 4th year student who could work an average of 20 hours per week. Pay is $10/hr. If interested, send your resume to Sarah Lanci at slanci@coloradomesa.edu.

A small local company who makes high performance antennas from aluminum tubing has reached out to Dr. Brower to request referrals for a part-time fabricator job. If you are interested, please e-mail Jeremy Cleaveland at jeremycleaveland@gmail.com to request details.

Career Opportunities

Engineers Wanted

Northrop Grumman Corporation in Aurora, Colorado is conducting College Day on October 13, 2016 and is interested in bright and talented engineers ready to start their professional careers. Northrop Grumman is a leading global security company providing innovative systems, products and solutions in autonomous systems, cyber, C4ISR, strike, and logistics and modernization to government and commercial customers worldwide.

Requirements to be considered for the position:
- Must be a junior / senior in your bachelor degree, or a graduate student
- A major or minor in one of the following fields:
  - Computer Science
  - Computer Engineering
  - Applied Math
  - Mathematics
  - Physics
  - Electrical Engineering
  - Mechanical Engineering
  - Aerospace Engineering
- Must have a 3.25 GPA or better
- Must be a U.S. Citizen
- Must be willing to obtain a security clearance

Please submit resumes by September 19th to the following email address from your college email server or attachment:
- Keith.ashton@ngc.com
- Kyle.rotte@ngc.com
- Paul.tighe@ngc.com
- Michael.malmquist@ngc.com

If selected from resume reviews potential candidates will receive invitations to Northrop Grumman Corporation College Career Opportunities.

Student Volunteers needed to judge
MESA Milk Jug Boat Competition on
Tuesday, Sept 20, 3:00 pm at Orchard Mesa Pool!

Please contact Harriet (hcarpenter@coloradomesa.edu) or sign up at the AEC front desk.
Thank you!
Scholarships

Through its scholarships, ASHRAE seeks to motivate students and prospective students worldwide to pursue an engineering or technology career in the HVAC&R field, part of the science, technology, engineering and mathematics (STEM) industry. The Society’s Scholarship Program also serves the public interest by aiding in the education of men and women to become qualified to practice as engineers in HVAC&R.

Over the course of 27 years ASHRAE has awarded more than $1.5 million to over 300 deserving students. Find out more at: www.ashrae.org/membership-conferences/student-zone/scholarships-and-grants/scholarship-program

CMU’s Society of Women Engineers is having their first meeting of the semester on Friday September 2nd at 10am at AEC Building B!

This is an excellent opportunity to become involved in a student organization and is NOT just for women – guys are more than welcome to join!! Topics to be covered at this meeting include planning for the next Go Baby Go event (modifying toy ride-on cars for kids with motor disabilities) and planning a sequence of guest presentations from industry professionals. This club is student-driven so if there’s something you want to see (tour an engineering facility, plan a “day in the life of an engineer”, design something, get feedback on resumes/cover letters, etc.) come to the meeting and get involved! If you’re unable to attend this meeting but are interested in the club, please contact Josie Carlson (joro0105@colorado.edu) or Victoria Chavez (Victoria.Chavez@colorado.edu).

Four of our current seniors in the BSME program spent the summer of 2016 at CU-Boulder participating in research experiences with CU-Boulder faculty members. Here’s a photo from their Boulder campus experience. From left to right they are:

Eric Nimtz
Jonathon Stelling
Pierce Edney
Mira Hopkins

Welcome back to Grand Junction! Have a great senior year!
It’s official! CMU and CU-Boulder have added Civil Engineering to their Partnership

On Tuesday, July 19, Colorado Mesa University and CU-Boulder held a press conference to announce the expansion of their engineering partnership to include a Bachelor of Science degree in Civil Engineering. This semester CMU students are already enrolled in CIVE 127 Engineering Drawing for Civil Engineers. CIVE 212 Introduction to Geomatics and CIVE 313 Theoretical Fluid Mechanics will be offered for the first time at CMU during the Spring 2017 semester. These new courses, combined with an appropriate course sequence of math, chemistry, physics and computer science will prepare students to continue work towards a Civil Engineering degree. Assistant Professor Kelly Bevill is the instructor for the new CIVE courses. Professor Bevill joined the Civil Engineering program over the summer as its first full-time faculty member. Dr. Gigi Richard is the Coordinator for the new Civil Engineering program. If you are interested in learning more about this new degree offering, please contact Dr. Richard at 970.248.1689 or grichard@coloradomesa.edu. The program sheet and curriculum flow chart are available. The program sheet and curriculum flow chart are available from your faculty advisor or Harriet Carpenter.

CMU to Break Ground for New Engineering Building on Tuesday, September 6

Here’s an excerpt from an August 8 article by Penny Stine at http://www.gjsentinel.com/special_sections/articles/new-projects-in-the-works-for-the-city:

On Sept. 6, the university will have the official groundbreaking ceremony for the engineering building, which will be home to both the mechanical and civil engineering programs. Both programs are the result of a partnership with University of Colorado at Boulder, which allows students to take all their classes at CMU but obtain an engineering degree from CU.

The building will be between Elm and Kennedy on Seventh Street, which is a noteworthy milestone for the university, which has been growing in a westward expansion for the last 20 years.

“Twenty years ago, there was a big conversation in the community about where we wanted Mesa State College to grow,” said Derek Wagner, vice president of intergovernmental and community affairs for CMU. “City council and county commissioners all suggested growth to the west, with boundaries on Seventh, 12th, Orchard and North.”

The new building will be 68,000 square feet and will also be home to the John McConnell Math & Science Center, which has partnered with students from CMU for years in its mission to get younger children excited about science and math.

“This is a great accomplishment for the city and the county,” Wagner said.
I work for a company called WeatherCloud (weathercloud.co) which is owned by Fathym (Fathym.com). WeatherCloud has been around since 2013. We build/create sensors that go on vehicles to deliver hyper-realistic data to the IoT (internet of things). I was hired as a Field Engineer after meeting this company at the CU Senior Showcase in Boulder. I am currently building sensors and doing all the installs. Building sensors includes doing micro-soldering, programming the sensors and helping design the plastic they come in. This work involves coding in open source Arduino language and some SolidWorks work. I have been to Houston, Salt Lake City, Alaska, and all over Colorado doing installs. These installs involve meeting with the customer and doing a sample install to teach them how to correctly install the sensors for optimized readings.

The next steps as the company grows is that I will lead all manufacturing for sensors and installs. This means that I will have to go through the Design for Manufacturing process with different companies to optimize the product. Also I will have responsibility for all installation companies as soon as we grow big enough to perform more installs than I can handle.

Being hired by a start up company has definitely been a great experience. I am responsible for doing a broad range of things outside my comfort zone and I look forward to seeing how this company grows.
Faculty Advisors
The purpose of a faculty advisor is to assist in the process of degree completion. Students are required to have a faculty advisor's signature on their Program Sheet and other graduation paperwork.

Find Your Advisor
Your Advisor assignments can be found by running your DegreeWorks report in MavZone. (Note: Dr. Brower is the secondary advisor for all Mechanical Engineering students. He is the primary advisor only for students in the CU-Boulder BSME degree program.)

Engineering Faculty Advisors
We strongly urge all students to take advantage of the opportunity to plan their course sequence, review potential elective choices, and discuss issues of concern with their Primary Faculty Advisor. Please e-mail your advisor to make an appointment when you need to see them.

Contact information for Engineering Faculty Advisors is shown below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Office Phone</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Scott Bevill</td>
<td>AEC 212</td>
<td>970.248.1459</td>
<td><a href="mailto:sbevill@coloradomesa.edu">sbevill@coloradomesa.edu</a></td>
</tr>
<tr>
<td>Dr. Timothy Brower</td>
<td>AEC 213</td>
<td>970.248.1662</td>
<td><a href="mailto:tbrower@coloradomesa.edu">tbrower@coloradomesa.edu</a></td>
</tr>
<tr>
<td>Dr. Francisco Castro</td>
<td>AEC 215</td>
<td>970.248.1564</td>
<td><a href="mailto:frcastro@coloradomesa.edu">frcastro@coloradomesa.edu</a></td>
</tr>
<tr>
<td>Dr. Scott Kessler</td>
<td>AEC 216</td>
<td>970.248.1673</td>
<td><a href="mailto:skessler@coloradomesa.edu">skessler@coloradomesa.edu</a></td>
</tr>
<tr>
<td>Ms. Sarah Lanci</td>
<td>AEC 125</td>
<td>970.248.1678</td>
<td><a href="mailto:slanci@coloradomesa.edu">slanci@coloradomesa.edu</a></td>
</tr>
<tr>
<td>Dr. Nathan McNeill</td>
<td>AEC 206</td>
<td>970.248.1623</td>
<td><a href="mailto:nmcneill@coloradomesa.edu">nmcneill@coloradomesa.edu</a></td>
</tr>
<tr>
<td>Dr. Gigi Richard</td>
<td>Wubben 223C</td>
<td>970.248.1689</td>
<td><a href="mailto:grichard@coloradomesa.edu">grichard@coloradomesa.edu</a></td>
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Networking, skill-building and access to the best minds in engineering. Before you're even out of school.

ASME is a worldwide organization with over 130,000 members, including over 32,000 student members in 152 countries.

As an ASME student member, you gain skills and practical experience outside the classroom. Connect with professional engineers in your area of interest; get access to hundreds of key resources that will open doors when you start your professional career.

Most benefits are available online, so you can access information when you need it, anytime and anywhere. Here are some examples:

- Take advantage of networking opportunities while learning about exciting new techniques and trends.
- Gain free access to educational tools specifically designed for students.
- Communicate and collaborate with fellow ASME members in your area and in your field of interest.
- Find essential content and interesting titles – from ASME Codes to heat transfer problems. You can also receive discounts as a member on your purchases.

Find out more at: www.asme.org/about-asme/professional-membership/benefits-for-students