To the optimist, the glass is half full. To the pessimist, the glass is half empty. To the engineer, the glass is twice as big as it needs to be!

Join us for Manufacturing Day!

Date: Friday October 7th
Time: 4-7pm
Location: AEC B

Register to attend (it’s free!) at: http://www.mfgday.com/events/2016/colorado-mesa-university-4
Questions? Contact Sarah Lanci at slanci@coloradomesa.edu or at 970-248-1678.

Join us for Manufacturing Day! Manufacturer’s Edge, along with SWE and the Formula SAE team, will be providing bbq and beverages to celebrate modern manufacturing! Come hang out with industry professionals (members of the Colorado Advanced Manufacturing Alliance and our Industry Advisory Council will be there), learn about this year’s senior design projects, and participate in some manufacturing-related activities. This is a good opportunity to dust off your resume and work on your networking skills while learning about local manufacturing companies and how they utilize engineers in their industry.

SWE is SWEET!!

Want to get involved in a student organization? Want to get involved in something related to engineering? Want to add stuff to your resume? Want to meet industry professionals in a casual setting? Come join SWE for some sweets and discussion Thursday Sept 22nd at 11am in the AEC conference room. We’re working on lining up guest speakers for a monthly series so if there’s a topic you’re interested in (How do I negotiate a starting salary? What’s it really like to work as an engineer?) come let us know! We can also let you know about our annual Go Baby Go event that will be held in March. This student club is open to guys and gals, alike, so come join us! For more information, contact Victoria (Victoria.chavez@colorado.edu) or Josie (joro0105@colorado.edu).

Student Volunteers needed to judge MESA Middle School Science Students’ Milk Jug Boat Competition on Thursday, October 13, 3:00 pm at Orchard Mesa Pool!

Please contact Harriet (hcarpenter@coloradomesa.edu) or sign up at the AEC front desk.
Welcome, Dr. Mitrano!

We’d like to introduce and extend a warm welcome to Dr. Peter Mitrano, who recently joined the Engineering faculty at CMU as a CU-Boulder Instructor in the Mechanical Engineering program.

Peter Mitrano graduated from the University of New Hampshire with a B.S. in chemical engineering and received his Ph.D. in chemical and biological engineering from the University of Colorado at Boulder where he was given the Max S. Peters award for outstanding graduate research. He has given invited lectures in Spain and the Netherlands on particulate flows. This fall, Dr. Mitrano is teaching fluid mechanics and measurements lab.

Are you graduating from CMU this year?

MET majors: Please take note!
(and visit http://www.coloradomesa.edu/registrar/graduation.html)

The semester prior to completion of all coursework, graduating students must:

- Review their DegreeWorks report and use the Graduation Planning Sheet to document how unmet requirements will be completed for all major(s) and/or minor(s). The student should meet with their advisor if they have questions.
- Meet with their advisor with the completed Graduation Planning Sheet to review and modify as needed. The advisor must approve the final plan.
- Submit the Intent to Graduate form to the Registrar’s Office by:
  - March 1 for Summer and December graduates
  - October 1 for May graduates
- Register for all needed courses and complete all requirements for each degree sought.

Did you know that freshmen can join ASME for free? Check it out!!!
go.asme.org/students
Here’s a preview of the technical electives to be offered during the Spring 2017 semester:

For Mechanical Engineering Technology Students:
ENGR 496 HVAC (McNeill) Heating, ventilation, and air-conditioning (HVAC) focuses on the design and analysis of systems to maintain comfortable, healthy, and productive indoor environments in buildings. As such, the course requires the application of thermodynamics, fluid mechanics, and heat transfer to the design and analysis of energy efficient buildings. This course will culminate in the completion of a project to design a HVAC system for a small commercial building. Prerequisite: ENGR 312.
ENGR 465 Electric Power Systems (Affrunti): Basic understanding of electric power systems; generation, transmission, distribution and consumption. Review of AC circuit analysis in single and three phase systems using time domain and phasor representation. Includes magnetic circuits, transformers and renewable energy generation from photovoltaic cells. Introduces electromechanical energy conversion from experiments with induction and synchronous motors/generators, and includes photovoltaic panels. Prerequisite: ENGR 317.

For CU-Boulder Partnership Students (Classes count as General or MCEN Tech Electives):
MCEN 4173 Finite Element Analysis (Castro): Introduces the theory behind and applications of the finite element method as a general and powerful tool to model a variety of phenomena in mechanical engineering. Applications include structural mechanics, mechanics of elastic continua, and heat conduction. Requires prerequisite courses of ENGR 263 Mechanics of Solids and MCEN3030 Computational Methods (all minimum grade C).
MCEN 4228 Control Systems Analysis (Laubscher): Development of techniques for controlling systems and understanding mathematical methods. Course includes detailed examples mechanical and electrical applications of these methods to the solution of real-world engineering problems. Prerequisite: MCEN 4043 or permission of instructor.
MCEN 4228 HVAC (McNeill) Heating, ventilation, and air-conditioning (HVAC) focuses on the design and analysis of systems to maintain comfortable, healthy, and productive indoor environments in buildings. As such, the course requires the application of thermodynamics, fluid mechanics, and heat transfer to the design and analysis of energy efficient buildings. This course will culminate in the completion of a project to design a HVAC system for a small commercial building. Prerequisite: MCEN 3012.
MCEN 4228 Industrial Controls (Penick/McNeill): Fundamentals of control of manufacturing processes. Applications of relay logic, input/output devices, and programmable logic controllers (PLC). Design of complete control circuits, selection of components, and cost estimation. PLC programming for discrete event control and for analog applications. Prerequisite: MCEN 3017.
ENGR 465 Electric Power Systems (Affrunti): Basic understanding of electric power systems; generation, transmission, distribution and consumption. Review of AC circuit analysis in single and three phase systems using time domain and phasor representation. Includes magnetic circuits, transformers and renewable energy generation from photovoltaic cells. Introduces electromechanical energy conversion from experiments with induction and synchronous motors/generators, and includes photovoltaic panels. Prerequisite: MCEN 3017.

Attention, AAS MET Students!!!
Please be aware when planning your course schedules that Spring 2017 will be the LAST semester when a morning section of MAMT 251/255 will be offered for engineering students. Please plan accordingly. (The course is not being eliminated; there will still be an afternoon section.) If you have questions, please contact Bill McCracken (wimccracken@coloradomesa.edu)
Internship & Career Opportunities

Current Internships and Job Opportunities are filed in a binder at the AEC Front Desk. Stop by and check them out! They are also usually posted on the bulletin board located on the 2nd floor student lounge at the Archuleta Engineering Center.

About AfterCollege

We have a lofty vision: to help every college student and recent graduate discover their career path. In our 15 year history, AfterCollege has become the largest career network for college students and recent graduates. Featuring 400,000 entry-level jobs and internships from 25,000+ employers, AfterCollege reaches more than 5,000,000 students each year, including 18,000 faculty, student group and administrative contacts at over 2,000 colleges and universities. Our patented job-matching algorithm pairs new job seekers with opportunities that fit their degree, school, skills and interests making the job search and the candidate search more efficient for everyone. **Check it out at www.aftercollege.com**

FALL CAREER FAIR

Technology Day / October 4
All Campus Day / October 5

Career Services Sponsored Events

2016 Fall Career Fair - 10/4 - 10/5, UMC Ballroom  11 am–4 pm

**October 4 - Technology Day**  Industries and organizations with a technology focus including: aerospace, computer science, engineering, information systems/technology, research, and other fields with a technical or scientific emphasis.

**October 5 - All Campus Day**  Industries and organizations with a non-technology focus including: accounting, banking, consulting, government, human services, management, retail, sales, and other fields without a scientific or technical focus.

Come prepared with resumes, but know that many employers today ask that their applicants apply online. The fair is your time to network and meet with representatives. This is your opportunity for them to put a face to the application. Learn more about various positions and organizations. Make sure to dress appropriately in business or business casual because first impressions make a big impact on potential new employers.

**Open to CU Boulder students and alumni from all majors, experience levels and backgrounds are welcome to attend this FREE event. No pre-registration is necessary.**
Photos from the September 6 Groundbreaking for CMU’s new Engineering Building

Professor Affrunti with members of our Industry Advisory Council: Shaun Burns, Jon Haftel, and Sven Wedekin
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 228</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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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 above.)

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!