“Engineering problems are under-defined, there are many solutions, good, bad and indifferent. The art is to arrive at a good solution. This is a creative activity, involving imagination, intuition and deliberate choice.”

Sir Ove Nyquist Arup

CMU Engineering Club
2nd Annual Comedy Hypnosis Show
featuring
Master Hypnotist Chris Mabrey
Adult Themes

When: Thursday, January 30, 2014 Show Begins - 7pm
Where: Recital Hall in Moss Performing Arts Center at CMU
Tickets: Pre purchase - GA $10 *CMU Students $8
At the door - GA $15 *CMU Students $10
Info: drhansen@mavs.coloradomesa.edu

*Must present Mavs card for Student Discount

Mark Your Calendar! Important Dates:

January 30: Comedy Hypnosis Show sponsored by CMU Engineering Club
March 6: CMU Spring Career Fair in UC Ballroom
March 7: CMU Student Showcase 2014 applications due
March 24-28: SPRING BREAK!
April 18 (Friday): Orientation for students entering the CU-Boulder/CMU Mechanical Engineering Partnership BSME program
May 2: CMU Student Showcase 2014 www.coloradomesa.edu/showcase
May 8 (Thursday): CU-Boulder Engineering Recognition Ceremony (Coors Event Center, CU, 1:15 pm)
May 17: CMU Commencement Ceremony

Many scholarship deadlines are looming ... time to finish your applications!

Check out the opportunities listed on page 3!
Career and Internship Opportunities:

MAVjobs # 6649: Substation Commissioning Engineer Job with Xcel Energy

Substation Commissioning Engineering is a growing department with several opportunities to enhance one's knowledge of the Xcel Energy Transmission System. Our primary focus is to commission new additions (e.g. relays) to the Xcel Energy Transmission System. Successful substation commissioning involves several aspects of transmission system design: substation protection and control, protective relay settings, SCADA, project management and transmission system operations. Our responsibilities include developing automated tests, hands-on testing in substations, personnel coordination and scheduling, and providing feedback to other departments to improve future designs and procedures. The successful candidate will be placed in the appropriate level within the Engineering job family based on their experience. The below description refers to entry level to 2 years of experience.

Summary: This is an entry level position designed to develop technical expertise in a particular area of specialty. Performs work that involves conventional types of plans, investigations, surveys, structures or equipment with relatively few complex features for which there are precedents. Activities are of limited scope requiring knowledge of principles and techniques commonly employed in the specific narrow area of assignments. May lead small-medium, non-critical projects and/or provide field oversight of critical projects under direction of higher level engineer or supervisor. Work is reviewed for soundness of technical judgment, overall adequacy and accuracy. As proficiency is gained, may work on portions of larger projects. Works under supervision and follows established procedures. May supervise or coordinate the work of interns, drafters, craft personnel, technicians and/or others.

MAVjobs # 6661: Ashley National Forest (Vernal, UT) Engineering Internship (Summer 2014)

This position is assigned to the Ashley National Forest Engineering Staff located in Vernal, Utah. The position will inspect construction projects, work with the engineering staff on design, survey, and preparation of drawings using AutoCad, inventory and replace road signs, install and monitor traffic counters, inspect roads and facilities and perform other related tasks. The ability to work in small teams safely and independently in remote locations scattered across a large geographic area is required. The position requires the selectee to possess and maintain a valid state driver’s license. The position work hours are from 8:00 am to 4:30 pm Monday through Friday during the summer months. Government housing is not provided with this position. This position pays $13.41/hour.

The vacancy announcement for this position will be posted on the U.S. Government's official website for employment opportunities at, www.usajobs.gov. Those that wish to be notified when the position is posted on the website can email Valton Mortenson (Roads Supervisory Engineer) at vmortenson@fs.fed.us by February 7, 2013. Please include your name, address, email address and best phone number that you can be reached at. Those desiring additional information can contact Valton Mortenson (Roads Supervisory Engineer) at (435) 781-5147 or Scott Bingham (Engineering Staff Officer) at (435) 781-5107.

Fabrication Apprentice at Reynolds Polymer

SUMMARY: Fabricate all Acrylic Parts and Panels to specification using a variety of tools.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

Reading and understanding basic blueprints and/or shop drawings. Layout basic Geometric shapes within Tolerance. Knowledge of use and maintenance of basic power and hand tools. Setup and operate Gantry Saw. Use of overhead crane and forklift. Cut/shape Acrylic to spec. Dry fit Acrylic Parts to be assembled to bonding tolerances. Understand and follow all Safety Policies and Procedures.

EDUCATION and/or EXPERIENCE: Machine Shop and/or Construction trades background helpful.

Contact Jeanette McCarmack (ncarmack@reynoldspolymer.com) for more information.

SUMMER RESEARCH PROGRAM AT UNIVERSITY OF NEBRASKA-LINCOLN

This intensive summer research experience provides mentoring and research experiences while allowing scholars to preview graduate school life. Students with a strong interest in graduate programs are particularly encouraged to apply, as are those from populations traditionally underrepresented in graduate education. All programs for 2014 are listed at http://www.unl.edu/summerprogram and include projects in Applied Mathematics, Bioenergy Systems, Biomedical Engineering, Chemistry, Earth and Atmospheric Sciences/Water Resources, Minority Health Disparities, Nanohybrid Materials and Algal Biofuels, Redox Biology, and Virology.

Our online application makes it easy for students to apply. Priority review of applications begins Friday, February 1 and all applications are due by Monday, February 17.
The American Council of Engineering Companies of Colorado (ACEC/CO) Scholarship Committee will award $30,000 in scholarships to students in engineering and surveying programs for the 2014-2015 school year. This amount will be divided between 9-10 students; the top award is $6,000; every awardee will receive at least $1,000. In addition, the top three awardees will be entered in the national ACEC scholarship program, and could receive an additional scholarship up to $11,500. The competition is open to students pursuing Bachelor's degrees in Colorado in a relevant engineering program and entering their junior, senior, or fifth year (in a five-year program) in the fall of 2014. To qualify, a student must be a U.S. citizen, with preference given to those who have an understanding of the consulting engineering profession. Students must be full time as determined by the school.

**Grand Valley Power Scholarships:**
This year Grand Valley Power will award six $1,000 scholarships to students in the Grand Valley Power service territory. These scholarships are granted for use at accredited colleges, universities, and vocational schools for undergraduate education. Applications are due for the GVP scholarships on March 15, 2014. For more information, go to: www.gvp.org/content/scholarships. For questions, contact Bill Byers at 970-242-0040.

Log into MavZone and go to the Student Finance tab to access an all-in-one scholarship application for general and departmental scholarships. The scholarship application became available on December 1. **APPLICATION DEADLINE IS FEBRUARY 21.**

**Fundamentals of Engineering (FE) Exam Now Computer-Based**
NCEES is pleased to announce that the Fundamentals of Engineering (FE) and Fundamentals of Surveying (FS) exams have fully transitioned to computer-based testing and are now administered exclusively at approved Pearson VUE test centers. Computer-based testing provides many advantages for both examinees and NCEES. Examinees are now able to schedule their exam at a time and location that work best for them and receive their results within 7 to 10 days. NCEES gains enhanced security and better uniformity in testing conditions with the move to computer-based testing. “We are excited that computer-based testing for the FE and FS is under way and that all of our preparation leading up to the conversion has been successful,” said Jerry Carter, NCEES Chief Executive Officer. “The transition to computer-based testing is a positive step forward for NCEES.” To learn more about the FE and FS exams, visit ncees.org/exams.
Congratulations!
To date, the following students have been accepted into the CU-Boulder/CMU Mechanical Engineering Partnership BSME degree program as part of the Class of 2016:

Christopher Beamon  
Benjamin Blandina  
Andrew Bristol  
Megan Brown  
Prashant Choudhary  
Gavin Downey  
Justin Edmonds  
Clancy Garoutte  
Aaron Howell  
Joseph Howerton  
Kristopher Jones  
Sean Kennedy  
Isaac Koch  
Danae Lanigan  
Cameron Morley  
Robert VanRoosendaal  
John Wieseler

CU Partnership Criteria
There are two ways for current CMU students to be accepted into the CU BSME program:
1) Earn at least a 2.9 overall GPA at CMU, after completing a two-course sequence in math and science with A’s and B’s, or
2) Earn a 2.9 or better overall CMU GPA after completing all required lower division coursework.

If you meet one of these criteria and you plan to apply for admission to the BSME program this academic year, we hope you’ve already turned in your CU Transfer Application. If not, please plan to do so before Spring Break. You may also want to schedule an appointment with your faculty advisor or the Partnership Program Director, Dr. Tim Brower (248-1662, tbrower@coloradomesa.edu) to review your academic progress and ensure that you are planning your future schedule of courses appropriately.

Have you met your Advisor?
Your official advisor is assigned based on the first letter of your last name, as follows:

<table>
<thead>
<tr>
<th>Last Name Begins With</th>
<th>Faculty Advisor</th>
<th>Office:</th>
<th>Phone:</th>
<th>E-mail:</th>
</tr>
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<tbody>
<tr>
<td>A-C</td>
<td>Dr. Nathan McNeill</td>
<td>AEC 206</td>
<td>248-1623</td>
<td><a href="mailto:ncmneill@coloradomesa.edu">ncmneill@coloradomesa.edu</a></td>
</tr>
<tr>
<td>D-H</td>
<td>Dr. Scott Bevill</td>
<td>AEC 212</td>
<td>248-1459</td>
<td><a href="mailto:sbevill@coloradomesa.edu">sbevill@coloradomesa.edu</a></td>
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<tr>
<td>I-L</td>
<td>Dr. Scott Kessler</td>
<td>AEC 216</td>
<td>248-1673</td>
<td><a href="mailto:skessler@coloradomesa.edu">skessler@coloradomesa.edu</a></td>
</tr>
<tr>
<td>M-R</td>
<td>Dr. Farzad Taghaddosi</td>
<td>AEC 125</td>
<td>248-1678</td>
<td><a href="mailto:ftaghaddosi@coloradomesa.edu">ftaghaddosi@coloradomesa.edu</a></td>
</tr>
<tr>
<td>S-Z</td>
<td>Dr. Francisco Castro</td>
<td>AEC 215</td>
<td>248-1564</td>
<td><a href="mailto:frcastro@coloradomesa.edu">frcastro@coloradomesa.edu</a></td>
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