It’s crunch time! The CMU Engineering Club will be leaving for Michigan on Monday, May 11, to compete in the Formula SAE series.

The team, known as Mesa Motorsports, will be competing in the static events this year, as critical components for the car did not arrive in time and the team was more focused on their school work. The team plans on a competitive showing in the static events which include, business presentation, cost analysis, and engineering design. The team has the potential to place well among the International field. Participating in the events this year will be an excellent learning experience and fuel the drive to perform in the full competition next year.

We would not have been able to get this far without the help of our sponsorship partners:

39N Racing
Mountain Racing Products
All-Metals Welding and Fabrication
Penske Truck Rentals
Batteries Plus Bulbs
Dr. Tim Brower

Flyin’ Miata
Black Kettle Technologies LLC
Grand Junction Chrysler
I.D. Concepts
CAB and ASG of Colorado Mesa University

THANK YOU! from Mesa Motorsports #52

In other news, The CMU Engineering Club was selected as CMU Club of the Year “in recognition of exemplary service to Colorado Mesa University, its students, and the community” at the Maverick Awards Ceremony on Saturday, May 9! CONGRATULATIONS!!!! A special thanks to the dedicated few! Keep up the hard work!
Congratulations to our 2015 Graduates!!!!!

**Ty Sickels**

Post-graduation plans: This summer I am going to find Forrest Fenn’s treasure. If I don’t succeed in finding the treasure I’m going to start working as an offshore support engineer for Shell.

Advice for future students?

Good things don’t come to those who wait. They come to those who work their asses off and never give up.

**Alex Zemezonak**

Post-graduation plans: Backpacking Central America then working for Abbott Laboratories in Chicago.

Advice for future students?

Good Luck!

**Eric Black**

Post-graduation plans: Working at Knott Laboratory LLC in Denver.

Advice for future students?

Don't give up. It's all worth it in the end.

YOU MEASURE THE SIZE OF THE ACCOMPLISHMENT BY THE OBSTACLES YOU HAD TO OVERCOME TO REACH YOUR GOALS. ~ BOOKER T. WASHINGTON
Congratulations to our 2015 Graduates!!!!!

Austin Burns

Post-graduation plans:
To start with Halliburton as a Frac/Acid engineer starting June 1st

Advice for future students?
Push through the hard classes and set yourself up for an easy Senior year, before senioritis kicks in!

Sean Bizer

Post-graduation plans:
Nothing set in stone yet ... stay tuned!

Advice for future students?
If you are a sophomore or below “get out while you still can”, if you are a junior or senior “it’s too late”

Oscar Madrid

Post-graduation plans:
Work full time at CoorsTek, Inc. as an Engineer I

Advice for future students?
Freshman and Sophomores: It’s never too early to start looking for internships, apply to every single one you can get your hands on.

Juniors: This too shall pass...
Congratulations to our 2015 Graduates!!!!!

Alice Kerbein

Post-graduation plans:
Working at Capco, Inc. as a research and development engineer.

Cy Henry

Post-graduation plans:
I will be travelling in Thailand for 6 weeks with my amazing wife!

Advice for future students?
Change your major!

Robert Rowsam

Post-graduation plans:
I’ll be going to work for Lewis Engineering as a Quality Engineer.

Advice for future students?
When nothing is going right, go to bed.

TRY NOT TO BECOME A PERSON OF SUCCESS, BUT RATHER TRY TO BECOME A PERSON OF VALUE. ~ ALBERT EINSTEIN
Congratulations to our 2015 Graduates!!!!!

**Cole Hanson**

Post-graduation plans: Designing bike parts at MRP

Advice for future students? Don't forget the washer

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**Jesse Talley**

Post-graduation plans: Lewis Engineering

Advice for future students? Work hard, don't give up!

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**Robert Lueck**

Post-graduation plans: Work for Reynolds Polymer Tech.

Advice for future students? Work hard, learn as much as you can, and don't be afraid to ask questions.

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SUCCESS IS WALKING FROM FAILURE TO FAILURE WITH NO LOSS OF ENTHUSIASM.

~ WINSTON CHURCHILL
Congratulations to our 2015 Graduates!!!!!!

Marcus Mathews

Post-graduation plans:
I plan to go for a cross country drive.

Best memory:
The time I spilled layout dye all over Bill’s newly painted floor.

Advice for future students?
Strive to improve yourself in whatever you do.

Terence Haley

Post-graduation plans:
Backpacking and mountain biking with friends and family around GJ and Utah

Favorite memory:
A foot race to Reynold’s Polymer between Dr. McNeill and Sean Bizer that ended with Bizer laying face down in the grass out of exhaustion.

Advice for future students?
“All I can do is be me, whoever that is”

And heartfelt congratulations to the 2015 graduates who preferred to remain anonymous, too!
We wish you ALL much success and hope you’ll stay in touch!

~Steve Jobs
Congratulations to our 2015 Graduates!!!!!

Thanks for all the memories!
Best wishes from all of us!
On April 14, 2015, Mr. Max Schmidt, District Manager, Orchard Mesa Irrigation District provided a guided tour of facilities located just south east of Palisade. One building houses pumps for raising Colorado River water into Orchard Mesa Irrigation District ditch one and two. The other building houses two water powered generators. A photograph (thank you Bob Wilson for the photos) of the facility is shown in Figure 1. On the left side is electric power generator and in center are pumps.

The tour began with a brief overview of the system and its history. Water is diverted from the Colorado River some few miles east of Palisade along I70; Cameo Diversion Dam in DeBeque Canyon. The structures can be seen from the Interstate.

This water serves some 5,000 landowners covering approximately 9,200 acres. Along the way are ditches, pipes, laterals, siphons, etc. all maintained 24/7 by the District.

The water must be raised in order to fill two ditches that run throughout the District. This is accomplished with four pumps that run on hydraulic power; i.e., they are powered by the same water that they are raising. Figure 2 is a photograph of the inside of the pump house. Pumps 1 and 2 are not shown in the picture.

Figure 1. Orchard Mesa Irrigation District Facilities

Figure 2. Pump house and group picture. (Mr. Schmidt can be seen in the center.)
It was noted that the pumps raise water to two different levels and therefore are slightly different in design and capacity. The sheer power, capacity and continuous duty of the pumps was quite interesting to this group of Mechanical Engineering students.

In the electric power building there were two 1932 hydro powered alternators. These were rated at 2300 HP, 73 feet of head, at 300 RPM. Even though built in 1932 they are capable of 2.0 MW. At the time of our visit one was producing 1.6 MW. These are tied to the Xcel grid so that the Irrigation District can gain revenue by selling power to Xcel.

Over half the households in Palisade are receiving power from this plant. Mr. Schmidt is looking forward to replacing the old generators in the near future. This is not because they do not work, but because there are no spare parts available.

Our trip was informative and educational. Mr. Schmidt is passionate. His enthusiasm was contagious. We appreciate his time, tour, information and dedication to serving the community.

Thank you Mr. Schmidt!
CU-Boulder/CMU Mechanical Engineering Partnership: Orientation for Incoming Juniors was held on April 17. We look forward to welcoming our largest class of Juniors in this program to date!

IAC Members Evaluated Senior Projects on May 1
CONGRATULATIONS TO THE FOLLOWING FIRST PLACE TEAMS!

**Mechanical Engineering - Senior Design, Track 12A**
MECHANICAL OILSEED PRESS: UTILIZATION OF OILSEEDS TO PROMOTE SUSTAINABLE PRACTICES BY SUPPLEMENTING THE FUEL SUPPLY OF LOCAL FARMS
Presenter(s): Cole Hanson, Daniel Harbert, Cy Henry, Robert Rowsam
Faculty Sponsor: Francisco Castro

**Mechanical Engineering - Open Design, Track 12B**
FLUID POWER SIMULATION FOR A PARTS CLEANING SYSTEM
Presenter(s): Kyle Bartels, Christopher Rowley, Alex Zemezonak
Faculty Sponsor: Farzad Taghaddosi

**Mechanical Engineering - First-Year Design Expo, Track 12C**
VAPOR CARBURETOR
Presenter(s): Joseph Buches, Cody Dozoretz, Dalton Hamer, Trenton Ingram, Heather Mayerle
Faculty Sponsor: Jody Kliska

**Mechanical Engineering - First-Year Design Expo, Track 12D**
THE JUGGERNUT STRESS DEMONSTRATION
Presenter(s): Stephen Drozda, Peter Greco, Manuel Prieto, Connor Timms, Christopher West
Faculty Sponsor: Sarah Lanci
**Internships**

Would you be interested in a "jump start" to your career? The US Army Corps of Engineers is seeking individuals pursuing a biology, chemistry, physical science, environmental engineering or other related environmental major who would be interested in a student internship position at the Grand Junction Regulatory Office. This small Army civilian office is located at 400 Rood Avenue, Room 224, Grand Junction, CO. The Corps Regulatory Program evaluates permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act relative to activities in jurisdictional waters of the U.S., such as streams, creeks, rivers, lakes, marshes and wetlands.

This is a paid federal internship program. The student employee would earn paid sick and vacation leave and would be eligible for insurance benefits. After completion of academic and work requirements, program interns could be eligible for permanent employment with the Federal government. Students are eligible to apply for this position if they are:

- Enrolled or accepted for enrollment in a degree program at an accredited institution;
- Taking a half- or full-time academic course load at a 2-year or 4-year college or university; graduate or professional school; and are a
- U.S. citizen or national who will be able to work a minimum of 20 hours per week.

The US Army Corps of Engineers is seeking individuals pursuing a biology, chemistry, physical science, environmental engineering or other related environmental major. This vacancy announcement will be out soon and open for 2 weeks.

This position will be advertised soon on USA Jobs at https://www.usajobs.gov. Individuals interested in this position need to submit their resume ASAP and other required information once the ad is posted.

For information about this internship, contact Sue Nall at susan.nall@usace.army.mil

**Scholarships**

**Society of Petroleum Engineers (SPE) – Western Slope Section**

The western slope section of SPE is proud to announce scholarship opportunities for engineering students interested in a career in energy. Funds are awarded directly to the most qualified students to help cover the costs of tuition, books and/or living expenses. The scholarship is supported by local energy companies through generous donations and is partially matched by SPE.

**Scholarship Requirements:**
- Full time undergraduate student in Engineering
- Minimum GPA of 3.0
- Resident of one of the following counties in Colorado/Utah: Garfield, Mesa, Delta, Montrose, San Miguel, Ouray, Gunnison, Pitkin, Eagle, Grand (Utah)
- An unofficial transcript that includes grades and credit hours for each course
- A one page essay; Include educational & career goals + why you’re a good fit for the scholarship

Applications are available at the AEC Front Desk or e-mail hcarpenter@coloradomesa.edu
Mechanical engineering already presents its share of employment possibilities, but combine it with the white-hot field of advanced manufacturing and the opportunities only widen.

ASME.org looks at five job areas for MEs to consider in a recent article:

- Medical Device Design and Manufacturing
- Sustainability Manufacturing
- Control Sensors Development
- Welding Engineer
- Supply Chain Strategy

Check out the full article at: https://www.asme.org/engineering-topics/articles/manufacturing-processing/5-job-areas-consider-advanced-manufacturing

SEEK Denver is a free summer learning program to help students in 3rd-5th grade develop math and science understanding that will help them in school and their future careers. The National Society of Black Engineers created SEEK to address the under-representation of students of color and girls in STEM fields. All are welcome to apply to be a college mentor!

As a mentor you will:
- Act as a role model for SEEK students
- Network with corporate sponsors and community officials
- Build your resume to reflect leadership and community involvement
- Make $2,000 per session!!!

Program Details:
Commitment: 4 weeks
Session 1 June 8th - July 3rd
Session 2 July 6th - July 31st
* Ask about being a mentor for both sessions

Apply Today!
https://www.nsbe.org/SEEK/MENTOR.ASPX
* Must be a current college student to apply

Questions?
Contact Matthew Clark - mclark@nsbe.org or Strauder Patton - Strauder.Patton@ch2m.com
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
Advisor assignments can be found in MAVzone under the Student Academics tab. Students can view their Academic Profile in the top-center column by selecting the current term in the drop-down box at the bottom of the profile and clicking Go. This will cause the current program of study and advisor(s) to appear. Your Primary Faculty Advisor will be the first name listed. (Note: Dr. Brower is the secondary advisor for all Engineering students. He is the primary advisor only for students in the CU-Boulder BSME degree program.) You can click on the envelope icon by the advisor's name to email your advisor.

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 make an appointment when you need to see your advisor.

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>
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<td>970.248.1564</td>
<td><a href="mailto:frcastro@coloradomesa.edu">frcastro@coloradomesa.edu</a></td>
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<tr>
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<tr>
<td>Dr. Nathan McNeill</td>
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</tr>
<tr>
<td>Dr. Farzad Taghaddosi</td>
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<td>970.248.1678</td>
<td><a href="mailto:ftaghaddosi@coloradomesa.edu">ftaghaddosi@coloradomesa.edu</a></td>
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ENGR 261 (Statics & Structures) to be offered during Summer Session
There will be a section of ENGR 261 offered at CMU during Summer Session 2015. A hybrid delivery format is likely (combination of on-line and classroom instruction.)

For more information, please contact Dr. Brower (tbrower@coloradomesa.edu or 970.248.1662)

IMPORTANT UPCOMING DATES:
Friday, May 8, 9:00 a.m.: CU-Boulder Engineering Recognition Ceremony (Coors Events Center, Boulder)
Saturday, May 9: CU-Boulder Commencement
May 11-14: FINALS Week
Saturday, May 16: CMU Commencement Ceremony (Stocker Stadium)

PLEASE CHECK THE LOST AND FOUND BOX IN THE AEC LOBBY BEFORE YOU LEAVE FOR THE SUMMER—IT IS OVERFLOWING!!!!