SWE is hosting their first annual Go Baby Go event on Saturday, April 16th right here at AEC!

Student teams of engineering and kinesiology students will be working in conjunction with Family Health West and Colorado Canyons Pediatric Rehabilitation to adapt four children’s electric ride-on cars so that they will work specifically for four children with motor disabilities. **We want your help!** We need students to assist in several areas, including electronics to rewire the vehicle foot controls up to hand controls. We must also adapt the vehicles to support the kids’ legs, torso, and head. If you want to help but don’t want to work directly with the cars and kids, there are plenty of other things to do! We’ll take volunteers for any portion of the day, so if you have work commitments or other time conflicts, we can work around them! This is a fantastic opportunity for all engineering students, lower and upper division alike.

Contact Prof Lanci or Josie Carlson with SWE to let us know you’re interested! Or if you just want to know more, slanci@coloradomesa.edu Josie.Rossi@colorado.edu

**ALSO PLEASE PLAN TO ATTEND ONE OR ALL OF THE FOLLOWING PRE-EVENT MEETINGS:**

- **Friday April 1st @ 12pm – 2pm:** prototyping session in the back of AEC B
- **Monday April 4th @ 12pm – 1pm:** prototyping session in the back of AEC B
- **Wednesday April 6th @ 12pm – 1pm:** Go Baby Go planning meeting, AEC conference room
We are Mesa Motorsports, a division of the Colorado Mesa University Engineering Club. We are a 12 man team comprised of top-notch students in the CU Boulder/CMU partnership program. We are driving our way forward toward a degree in Mechanical Engineering in Grand Junction. Our main focus has been an international competition held yearly at Michigan International Speedway in Brooklyn, MI called Formula SAE. This is a prestigious competition as students from around the globe put their skills to the test in a multi-dimensional competition. The team is tasked with designing, fabricating and racing an open wheeled single seat automobile. FSAE has been running since 1979. Many teams we are competing against have up to 40+ people with $30,000 - $60,000 budgets and have been competing for 20 years. Our dream team from Western Colorado was a group of 4 founding members last year that has now expanded threefold into this year’s team.

We competed last year and placed in the top 100 despite not having a running vehicle (financial and time constraints being more than we could overcome.) We competed in all the static events. Placing in the top 50% in the business presentation, and experiencing a technical inspection and design critique from automotive industry judges who hail from all facets of the automotive industry was intense and amazing. Now, we have developed our second car based on the 2015 experience and design review critique that we received from the judges. From this, along with our super brain powers, and mechanical aptitude, we have made many substantial improvements designing for a faster, lighter, safer and more efficient car.

VROOOOM!

This year’s focus is to participate in our first dynamic events (AKA - actually race our car!) This is where your help is so greatly appreciated! With 5 weeks left to complete the car, we have hit a financial road block. All of us are pursuing a degree in the field of mechanical engineering with a desire to work in the automotive industry. This competition is the most practical, tangible, and complex piece of this roadmap toward our future. This engineering process of building a car from scratch is being done to prove to our professors, our future employers, and mostly to ourselves that we CAN MAKE IT HAPPEN!

Mesa Motorsports Launches GoFundMe Campaign: www.gofundme.com/cmufsae2016 Please spread the word!
Orientation for students who will be incoming Juniors to the CU-Boulder/CMU Mechanical Engineering Partnership in the Fall 2016 semester will be held in the AEC Conference Room on Friday, April 15, 8:30 am until noon. Please contact our Administrative Assistant, Harriet Carpenter (970.248.1400 or hcarpenter@coloradomesa.edu), if you have questions.

Congratulations to students who will be participating in a Research Experience for Undergraduates (REU) in Boulder this summer!

Mira Hopkins
Eric Nimtz
Augusto Pizzo
Renato Souza

Can you help with the 8th Grade Career Fair on Monday, April 11th?

We REALLY need some student volunteers to help staff a table and talk to 8th graders who might be interested in pursuing a degree and career in the field of Engineering! The event takes place on MONDAY, April 11, from 10 am til 2 pm at the University Center. Please contact Harriet Carpenter (hcarpenter@coloradomesa.edu) if you can help for an hour or two!

Take note! Admission Requirements for CU-Boulder/CMU Mechanical Engineering Partnership’s BSME degree program are changing!

For students who apply to enter the BSME program as Juniors for fall semester 2017 and later, their overall GPA for courses taken at CMU must be 3.0 or higher. (Previously, the overall CMU GPA requirement was 2.9.)
Did you catch our Mesa Motorsports FSAE team on the news????? They were highlighted on KJCT’s Education Matters segment on March 30. If you missed it, you can view the segment at:


Mesa Motorsports In The News!

Job Opportunities

Production Supervisor

Summary/Objective
The M320 Production Supervisor is accountable for supervising employees in CNC machining and assembly of DoD weapon systems. Responsible for the security of Category IV weapons, and effectively interact with multiple departments to assure success of line start-up and production.

Position Type/Expected Hours of Work
This is a full-time position. Hours of work are currently Monday through Thursday, 7:00am to 5:30pm, 40 hours per week. Occasional evening and weekend work may be required as job duties demand.

E-mail Harriet Carpenter (hcarpenter@coloradomesa.edu) or stop by AEC for a complete job description and instructions for applying.
On March 9, 2016, the ENGR 465 Electric Power class visited our local Xcel substation. Mr. Rocky Gomez hosted an educational as well as informational tour. We were requested to wear hard hats, cotton clothing and boots, preferably steel toes. Such are safety considerations when being close to very high voltage and power distribution. The substation is connected to a transmission line loop running at 235,000 Volts. The very large insulators shown in the picture are carrying that high voltage. Just behind our group is a 25,000,000 Volt-Ampere transformer that converts the three phase 235,000 Volts to 13,500 Volts which is distributed to customers in the area. The smaller insulators on the transformer carry the lower voltage. Needless to say, we followed Mr. Gomez’s advice to ‘touch nothing.’ To the right (not shown in the photo) is a building that contains sensing, controls, recording, and numerous other data acquisition instruments needed to assure the substation is operating properly and to take action in the event of fault. The power company calls this Supervisory Control and Data Acquisition (SCADA). There was a wide variety of equipment in the building, a lot of which we study in the electronic portions of our curriculum. SCADA can detect problems at great distances and take action to protect or disconnect neighborhoods depending on the type of fault. It can shed load in the event of voltage sag from overloading. After the tour Mr. Gomez took time to talk to us about being an electric power company employee. Basically, it is a 24/7 type assignment that many times requires attention in the middle of the night on Holidays. Most people take for granted the availability and omnipresence of electric power. Talking to Mr. Gomez gave us respect and appreciation for the continuous work that goes into providing power. Mr. Gomez, we thank you for taking time for our visit and we appreciate your commitment.
Recent Events at the Archuleta Engineering Center

SWE PLANS FOR SPRING SEMESTER

AEC PI DAY 2016
Finalizing 1st Year Projects
Thank you, students!!!!!

We deeply appreciate the time and effort our students spend assisting with community outreach events!

Fruita Middle School MESA Club
Milk Jug Raft Competition
Student Judges:

Victoria Chavez
Eric Nimtz

Tour Guides and Demo Operators for
February 2016 West Middle School Field Trip to AEC

Ken Banning
Ben Blandina
Megan Brown
Josie Carlson
Victoria Chavez
Corbin Cooper
Pierce Edney

Katherine Havens
Keegan Kaiser
Ryan Kawano
Sean Kennedy
Isaac Koch
Danae Lanigan
Aaron Troxel
Alumni News

Marcus Matthews (BSMET, 2015) reports that he is working as a Manufacturing Engineer at Ametek in Grand Junction. In Marcus’ own words (and photos): We make gauge clusters here. I've attached a few photos of my first project; designing a decal press and interchangeable nests for different gauge models, and wiring and debugging a system for testing for leaks and missing components in a completed gauge.

Thanks for keeping in touch, Marcus!
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 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>
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<tr>
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<tr>
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<td><a href="mailto:nmcnell@coloradomesa.edu">nmcnell@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>
</tr>
</tbody>
</table>

(Civil Engineering)

IMPORTANT UPCOMING DATES:
Friday, April 1, noon—2 pm: Go Baby Go prototyping session behind AEC-B
Monday, April 4, noon—2 pm: Go Baby Go prototyping session behind AEC-B
Wednesday, April 6, noon—1 pm: Go Baby Go planning session, AEC Conference Room
Thursday, April 7, 4-6 pm: Guest Speaker Brent Brown, LED expert and aviation aficionado, at the University Center (sponsored by the Maverick Innovation Center)
Monday, April 11, 10 am—2 pm: 8th Grade Career Fair, UC, WE NEED VOLUNTEERS!!!!
Friday, April 15, 8:30 a.m.—noon: Orientation for incoming CU (ME Partnership) students
Saturday, April 16: 1st Annual Go Baby Go Event sponsored by SWE
Friday, April 29: Seventh Annual CMU Student Showcase
Wednesday, May 4, 4:00 pm: Industry Advisory Council meets to review Senior Design Projects
Wednesday, May 4, 6:00 pm: Senior Recognition Celebration
Friday, May 6, 9:00 a.m.: CU-Boulder Engineering Recognition Ceremony (Coors Events Center, Boulder)
Saturday, May 7: CU-Boulder Commencement
May 9-12: FINALS Week
Saturday, May 14: CMU Commencement Ceremony (Stocker Stadium)
CMU is now offering Civil Engineering courses!

Are you interested in Civil Engineering?
Have you ever wanted to build the world’s tallest building? The longest bridge?
Interested in environmental engineering?

According to the U.S. Bureau of Labor Statistics,
employment opportunities for civil engineers are on the upswing!

Beginning in Fall 2016, CMU will offer courses that will be part of a
Civil Engineering BS degree to be announced later this year!

New courses to be offered this fall include:
CIVE 127 Engineering Drawing for Civil Engineers – TR 10-11:50am
CIVE 212 Introduction to Geomatics – MW 1-1:50pm and Lab R 9-11:50am

The new courses combined with an appropriate course sequence of
math, chemistry, physics and computer science courses will prepare
you to continue toward a Civil Engineering degree

If you’re interested in Civil Engineering please contact:

Dr. Gigi Richard
Wubben 223C, 970.248.1689
grichard@coloradomesa.edu
Guest Speaker
Brent Brown
LED expert and aviation aficionado

Thursday, April 7 • 4 - 6 pm
Meyer Ballroom – South in the University Center

Maverick Innovation Center  970.248.2143