

# University of Arizona

## Construction Engineering Management

### Spring 2020 Update



## ***Connecting industry and students***

In 2020 all of our lives changed due to the Covid-19 pandemic. [Construction Engineering Management \(CEM\)](#) at the University of Arizona is adapting to the changing environment and our students have been amazingly resilient. Industry and alumni partnerships continue to be at the center of everything we do in CEM. For over 5 years, Travis (UA alum with Sundt) and Shannon McCarthy and their family have donated to CEM through their family foundation, the George Henry Mackintosh Foundation. Their foundation is dedicated to enhancing the educational experience, and their gifts are having an incredible impact on UA students' lives. With the University budget under pressure, gifts from companies, alumni, and friends of CEM mean more now than ever before. Information on how you can donate is provided at the end of this letter.

Spring highlights include:

- Construction student profile,
- Heavy civil and design-build teams for ASC Reno,
- Industry speakers and site visits,
- Industry mentors in Engineering Leadership seminar,
- Bill Lloyd Sr. ABA Scholarships

## **Meet our construction students**

### ***Charla Sue Johnson Army ROTC Cadet, UA Civil/Construction Engineering Student (BS May 2020)***

*Enrolling in Army ROTC and majoring in Civil/Construction engineering have been the two best decisions of my life. The Army ROTC Program gives me the opportunity to challenge myself, grow as a person, and serve my country, while engineering has opened doors for a successful and rewarding military and civilian career. While in the ROTC Program I taught English in Hungary, jumped from aircrafts in Air Borne school, and experienced a month at Advanced Camp in Kentucky. The civil engineering program here at the U of A is absolutely amazing! I have learned so much in*



*my classes and made amazing friends. During the past two summers I have interned with Rosendin Electric in Hawaii as an assistant project manager. I did quantity takeoffs, created bills of materials, worked on prefabrication, and did quality control on site. Upon graduation in May 2020, I will commission as an Officer in the U.S. National Guard and work full-time with Rosendin Electric in Phoenix.*

## **Heavy Civil and Design-Build Teams for ASC-Reno**

Engineers love to solve problems and there is no better place for construction students to do that than at the Region 6 and 7 [Associated Schools of Construction \(ASC\)](#) competition in Reno, NV every February. This year, over 1,500 students from 53 schools met up with 1,400 industry professionals from 104 companies. After months of preparation with coaching from Sundt (Ian McDowell) and Granite (Jake Buckley, Paul Preston, and Herb Tiffany and others), UA sent student teams to Reno in the **design-build** and **heavy civil** categories. The DB team prepared written and oral proposals for an interdisciplinary science and technology building, while the heavy civil team prepared a risk analysis, bid package and oral presentation on the Oroville Dam reconstruction. Students learned details about site layout, estimating, scheduling and learned the big picture of planning a safe and efficient project. We are grateful for our corporate partners for donating \$20,000 for team expenses for this event.



### **ASC-Reno: Thanks to our corporate donors**

Barker, Core, DBIA Western Pacific Region,  
Bernhard TME, DPR, GLHN, HDR, Holder, Kitchell,  
M3, Parsons Steel, Rummel, SAECO, Sturgeon  
Electric, Sundt, Swaim, Wood Patel

### **And thanks to those who helped prepare our students**

Granite, Sundt, BFL, DPR





# Industry Speakers

Some amazing speakers interacted with our students in our construction classes this fall.

## Industry speakers

- Ian McDowell (Sundt) – RFIs
- Naresh Samtani (NCS GeoResources) – geotech for construction managers
- Bob Martinez (Granite) – quantity takeoff and cost estimating
- Xavier DeEchavarri (ADOSH) – construction safety
- Dean Miller (Sundt), Jose Aguilar (WPS), and Troy Ballard (Phantom Aerial) – drones in engineering and construction
- Grey Major (KE&G) – project control
- Garry Brav (BFL) – leadership and finances
- Mike Nelson (ExxonMobil) – leading without authority
- Phil Hall (Army Corps of Engr, MWH Construction) – leadership for engineers
- Kathy King (Ventura County, ExxonMobil) – communication for engineers
- Laura McGill (Raytheon) – leading with integrity
- Russell Leftwich (Intersystems) – leading change
- Liesel Folks (U of A) – leading through turbulent times
- Simone Vitale (Amazon) – leading global teams
- Sara McCoy (SRP) – leadership and self-discipline



## Industry Site Visits

Our industry partners provided some great site visits.

### Construction site visits

- Flin Luxury Apartment Homes (Tofel-Dent)
- DoubleTree Hotel (The Ryan Co.)
- Aspire midrise apartments (SAECO)
- Custom home (John Wesley Miller)

Thanks to our corporate program partners

**Borderland \* DPR \* Holder \* Sundt**  
**Henry George Mackintosh Foundation**



Thanks to our individual donors to CEM

**Barry Abbott, Sal Caccavale, Phil Hall, Robert Hall,  
Mike Nelson, Matthew McDole, Dave Zaleski**

## **Industry Mentors in ENG495-Engineering Leadership seminar**

This is the sixth spring Mike Nelson and I have co-taught this one-credit seminar which enrolls engineering students from across the College of Engineering. A key component to this class is the one-on-one interaction students receive from their industry mentors. Mentors listen, ask questions, and provide feedback to students on the leadership development plans they write for their future careers. Our cadre of outstanding mentors include: Barry Abbott, John Bernal, Priscilla Cornelio, Phil Hall, Tom McGovern, and Mike Nelson. One student shared her appreciation this way:



*This course was definitely one of my favorites, the amount of information I learned and the many great leaders we interacted with and met really inspired me to never give up and to always have a vision and work hard for what we most desire. I have learned a lot about myself and my leadership style and now I know how to execute those weaknesses and strengths in future projects and even industry.  
(Junior in Systems Engineering)*

## **The Bill Lloyd ABA Scholarship**

The Bill Lloyd ABA Scholarship was created in recognition of Bill Lloyd Sr.'s role in the development of the Tucson commercial construction industry. Bill Sr. was a 1963 graduate of Civil Engineering at U of A and founded [Lloyd Construction](#) in Tucson in 1969. The scholarship is administered by Arizona Builders Alliance who serves as the industry sponsor for the UA Associated General Contractors (AGC) chapter. Four civil and architectural engineering students pursuing careers in construction were awarded \$1,250 each for the 2020-21 academic year. Ray Baralles is a senior interning with Core Construction. Muhammad Mohd is a junior interning with KE&G. Deborah James is a junior interning with Caliber. Spencer Browne is a senior interning with Lloyd.



## Thank you

I am grateful to our class of 2020 for selecting me to be the faculty speaker at the Civil and Architectural Engineering virtual commencement this spring. Our seniors in construction have had strong internship experiences that have led to great full-time job offers. This year I have also been able to publish research I conducted called [Percent Base Design and Initial Award Performance in Design-Build Highway Projects.](#)

Your involvement and gifts are making an impact on students and the construction industry. Thank you for your partnership.

Sincerely,

*Dean Papajohn*

Dean Papajohn, PE, PhD, ENV SP, DBIA Assoc.  
Associate Professor of Practice  
Civil & Architectural Engineering and Mechanics  
*May 17, 2020*

## Giving

You can give online at [Give Today](#) or checks can be written to the UA Foundation and sent to:

*Therese Lane, Civil Engineering, 1209 E. Second St., Tucson, AZ 85721-0072.*

Please designate your gift for either *CAEM Construction Engineering Management **General Fund*** (for current operating expenses) or *CAEM Construction Engineering Management **Endowment*** (for building a sustainable funding source for CEM). Automatic monthly or one time gifts can be set up.

