

# University of Arizona

## Construction Engineering Management

### Spring 2023 Update



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

Construction Engineering Management (CEM) at the University of Arizona had a great year connecting with industry partners and growing students for the construction industry. The photos above show construction site visits with CalPortland, Granite, and WSP/ADOT. This spring Dave and Penny Crawford established a construction endowment, and the Henry George Mackintosh Foundation launched a scholarship for construction students at UA. CEM graduates are entering a strong job market and eight freshmen in the UA Beavers Heavy Construction Internship program are starting internships in heavy construction. Read more about these and other CEM highlights below. Your generosity matters and helps CEM train the next generation of construction engineers.

## **Meet Our Construction Students**

### ***Grant Hoffman, UA Civil Engineering (BS May 2023)***

*Grant has been interning with Sundt's commercial building group in Tucson and will join full time after graduation. Grant was captain of the UA Design-Build team and led his team [to first place in the National Design-Build Institute of America \(DBIA\) Student Competiton](#). Grant also led the UA Commercial Building team in the Associated Schools for Construction competition in Reno. Grant also served as the secretary of DBIA and as an engineering ambassador. Grant did all of this while completing his degree with honors and minoring in math and music. Grant has an incredible capacity to get things done and will be an asset to the local construction industry.*



## Donors contributing to the CEM Endowment

We are grateful to our industry partners who are building up the UA Construction Engineering Management Endowment. This year Dave and Penny Crawford started a significant gift to CEM. Dave is a UA alumni and former CEO of Sundt. Dave is a tremendous advocate for the construction industry and states, *“Construction is very attractive to young people because we are charged with building America. We can make a difference and we can see it on a daily basis.”* Please consider joining us in building up the CEM Endowment which is intended to be a sustainable funding source for CEM and a pipeline of next-generation construction engineers.

**Borderland**

**WT**

**G**  
**GRANITE**

**KE&G**

**HP**

**HENSEL PHELPS**  
Plan. Build. Manage.



**SUNDT**

Barry & Adrienne Abbott, Dave & Dede Areghini, Dave and Penny Crawford, Mike & Marie Hoover,  
Travis & Shannon McCarthy

Thanks to this year's corporate program partners

**Archer Western/Walsh \* BFL \* CalPortland \* Concord  
Core \* DPR \* Gervasio and Associates \* Granite  
Henry George Mackintosh Foundation  
Hensel Phelps \* Hunter \* Kappcon \* KE&G \* Kraemer  
M3 \* Marnell \* McCarthy \* Southwest Gas \* Sundt  
Whiting-Turner**

Thanks to this year's individual donors to CEM

Sal Caccavale, Phil Hall, Matthew McDole, Becki Nelson, Dean Papajohn



# UA Beavers Heavy Construction Internships

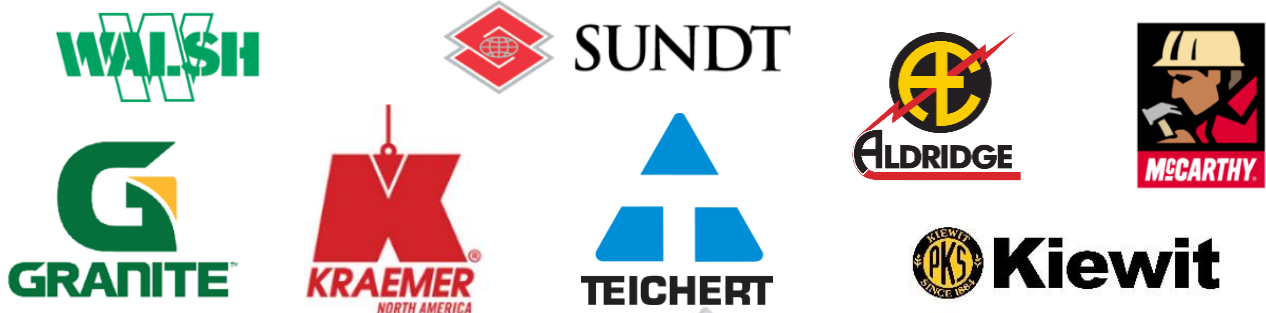


Two years ago, we launched a program to attract freshmen engineering students to the heavy construction industry. This year the [Beavers](#) joined this effort and is helping to underwrite the program along with Mike Hoover (CEO of Sundt). Through this program, Heavy Construction careers are advertised to non-declared freshmen engineering students. Applicants are screened on campus and then resumes of eligible students are provided to partnering companies. Companies determine who they will interview and hire for an internship. Selected students participate in an internship preparation seminar throughout the fall. This spring’s seminar topics included:

- Plan reading, construction details, Envision sustainability framework
- Concrete construction: Paul Preston, Granite
- Wastewater treatment plants: Austin Kearns, Walsh
- Day in the life of a superintendent: Hunter Brown, McCarthy
- RFIs, Submittals, and weekly meetings: Brandon Samao, Kraemer
- Conflict resolution for field engineers: Melissa Moreno and Sean Ray, Sundt
- Steel Construction: Ryan Walker, Sundt
- Prefabrication: Jeff Buckley, Aldridge Electric
- Deep excavation and shoring: Drew Jackson and Teegan Crabb, McCarthy
- Temporary works: Kasper Kerkhof, Flatiron
- Job Order Contracting: Mike Ramirez and Clay Gunzenhauser, PCL

Eight freshmen engineering students are starting internships in May with the company partners listed below. Our plan is to help these eight students over the next three years prepare for careers in heavy construction and to recruit larger numbers of new freshmen each year.

## Heavy Construction Partner Companies



## TAKE 5 Lunches

Through our AGC and DBIA chapters, we organize TAKE 5 lunches throughout the year where one or two engineers from a company host a lunch on campus for five students. This networking opportunity helps students learn more about the work companies are doing, career opportunities, and industry trends. Likewise, companies can find out what our students are learning in their classes, clubs, competitions, and internships. This year, TAKE 5 lunches were hosted by **DPR, Hensel Phelps, Kiewit, RLB, Kraemer, Lloyd, BL Group, Bechtel, Climatec, Rick Engineering, and Mortenson**. If you are interested in hosting a TAKE 5 lunch, please let me know.



The [Arizona Builders Alliance](#) is our AGC chapter sponsor and the [DBIA Western Pacific Region](#) is our DBIA chapter sponsor.

## UA Commercial Building and Heavy Civil Teams

The [Associated Schools of Construction \(ASC\) Region 6&7](#) coordinates an annual construction competition in February. The UA student teams practiced from September to February under the guidance of Ian McDowell (Sundt) for the Commercial Building team and under Paul Preston and Will Vail (Granite) for the Heavy Civil team. There is also an alternates team where our UA sophomore Saul Guillen achieved first place. In addition to team skills, students learn to interpret plans and specifications, perform earthwork calculations and quantity takeoff, prepare estimates and schedules, analyze site logistics and risk, and much more. This is the premier construction event of the year with over 50 universities competing in 17 competitions sponsored and judged by industry. UA has been participating in this event since 2018.



## ABA Bill Lloyd Sr. Scholarship

Congratulations to Luis Estrella and Adrian Maldonado on receiving the Bill Lloyd Sr. Scholarship from [Arizona Builders Alliance \(ABA\)](#). Luis was a member of the UA 2022-23 Commercial Building team that competed in the Associated Schools of Construction competition in Reno, NV in Feb. 2023. Luis has interned with the City of Tucson and Hensel Phelps. Adrian is interning with Smyth Industries and previously worked for Borderland Construction.



## Henry George Mackintosh Foundation Scholarship

*Reese Johnson, UA Civil Engineering (BS May 2023)*

The Henry George Mackintosh Foundation celebrates the Mackintosh family's commitment to education, including engineering and construction. The first Henry George Mackintosh Foundation scholarship at the University of Arizona was awarded to Reese Johnson for 2022-23. Reese was the project manager for his two-semester capstone engineering course. The past two summers Reese interned with Freeport-McMoRan. Reese is graduating with honors and will be joining the Bridge and Marine District with Kiewit in Seattle.



## CEM Alumni Spotlight

*Maria Quintero, UA Architectural Engineering (BS May 2021)*

After graduation, Maria joined Suffolk Construction. She is currently working as a project engineer on the [Fig & Pico Conference Center and Hotel](#) in downtown Los Angeles. The project comprises two Marriott properties, the Moxy and AC Hotels, and offers 727 guest rooms and twelve unique dining and entertainment venues. At UA, Maria was involved in UA Rise Together mentoring for women in civil, construction, and architectural engineering.



## Thank you

This spring I am grateful for the teaching support from Wylie Bearup and Ian McDowell in CE497/597 Public Works Capital Construction and CE381 Construction Engineering Management. Wylie and Ian both bring years of industry experience to their teaching and are able to keep content and assignments industry-relevant. And to all our industry and alumni partners, 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, Assoc. DBIA  
Professor of Practice  
Civil & Architectural Engineering and Mechanics  
May 14, 2023

## Giving

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

*Johanne Ives, The University of Arizona Foundation, PO Box 210109, Tucson, AZ 85721-0109*

Please designate your gift for either

- *CAEM Construction Engineering Management (CEM) General Fund* (for current operating expenses) or
- *CAEM Construction Engineering Management (CEM) Endowed Fund* (for building a sustainable funding source for CEM).

Automatic monthly or one-time gifts can be set up. Thank you!



*PPE donated by industry partners.*

*Please let me know if your company would like to donate a dozen or half a dozen or even a couple of hard hats, safety vests, or safety glasses.*

