## **Colorado State University, Fort Collins, Colorado**

At the University of Colorado, the faculty was looking for unique was to bring industry into the classroom without disrupting the natural flow of the class schedule and limited time available in the curriculum. The faculty devised a new model they call the “Boot Camp” and brought in a slew of precast concrete industry professionals to help introduce students in the engineering and construction management schools to a variety of precast ideas and concepts over the course of a 8 week class.

Even with Covid protocols, the class was still able to take place and industry members were able to be on campus in person. Twelve students were enrolled in the program, so social distancing was possible, although difficult because student’s natural inclination is to huddle together to work on projects in the boot camp format. To reduce the “huddling” around paper drawings, professors Rebecca Atadero and Mohammed Meheny put the project on compter.

For Meheny, the biggest challenge this year was not being able to give students the in-the-field experience on job sites that they typically get in the Boot Camp.

The program is paying off. Mehaney reports that he has heard from students who say how grateful they are because when they get assigned to a precast project they feel they may know more about precast than other people on the job. Even more experienced workers. “Our program is more about construction engineering and management,” says Mehaney. “We try to mimic a design build process and students start from the very beginning just with some fundamentals.”

The teaching is done in large part with the help of industry mentors from various parts of the industry who come in and work with students. Mehaney facilitates and coordinates the curriculum and syllabus and puts it into an academic format – focusing on problem solving.

**Unique Program Aspects**

* Course is taught as a “Boot Camp” add on to regular curriculum.
* Since the course is developed “outside” of the regular curriculum format, it is intensely focused on precast and taught hand-in-hand with industry collaboration.
* The focus goes beyond precast design and into issues such as scheduling, shipping, and estimating.
* Each lecture is compressed, taking 3-4 hours and meeting only once a week.
* Students work in integrated groups, mixing engineering and construction management

**Faculty**

Rebecca Atadero, PhD, PE

Associate Professor

Mohammed Meheny, PhD

Assistant Professor, Construction Management

**Industry Partners**

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**Encon United**

Jason Lein

**PCI Mountain States**

Jim Schneider

**Wells Concrete**

Mike Hemberger

Dan Parker

**Student Statistics**

* Both civil engineering and construction management students take the course together
* This year there were 12 students in the Boot Camp
* Students who leave school after taking this course work for general contractors, precasters, engineering firms and other construction-related industries