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College of Engineering

CIVIL ENGINEERING | CONSTRUCTION MANAGEMENT

NEWSLETTER



2024

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2025

Message from the Chair

Dear friends and colleagues,

As the 2024–25 academic year comes to a close, I'm pleased to reflect on the many accomplishments and milestones our department has achieved over the past year.

One of our most exciting developments was the addition of Dr. Euysup Shim as the new Director of the Construction Management program. Dr. Shim joined CBU in July 2024 after serving for 16 years at Illinois State University (ISU), where he taught and coordinated the CM program. He brings a wealth of experience in teaching, research, and student competition leadership, particularly at the ASC competitions. We are grateful for the strong foundation he has already built in his first year and look forward to what lies ahead under his leadership.

Our faculty have continued to serve with excellence both inside and outside the classroom. Their dedication to our students and to the broader community has exemplified our mission to integrate faith, learning, and service. This year, our students actively participated in high-impact extracurricular activities, including the ASC Reno Competition and the Pacific Southwest Symposium (PSWS), hosted by Cal Poly Pomona. These experiences not only strengthened students' technical skills but also fostered character, teamwork, and leadership. We are especially thankful to our industry partners, whose generous support helped make these opportunities possible.

In addition to competitions and internships, we expanded our outreach initiatives aimed at inspiring future generations in STEM. Events like the CBU Gingerbread House Shakedown and the CECM Summer Camp helped spark curiosity and excitement among younger students about engineering and construction.

As we move forward, let us build on these achievements and continue to pursue excellence in education, service, and innovation. On behalf of our faculty, staff, and students, thank you for your continued prayers and support. We look ahead with hope and anticipation for the upcoming year, including next year's capstone projects and competitions like ASC Reno and ASCE PSWS.

Thank you for being part of our journey.

Blessings,

Jong-Wha Bai, Ph.D., P.E.

Department Chair / Professor



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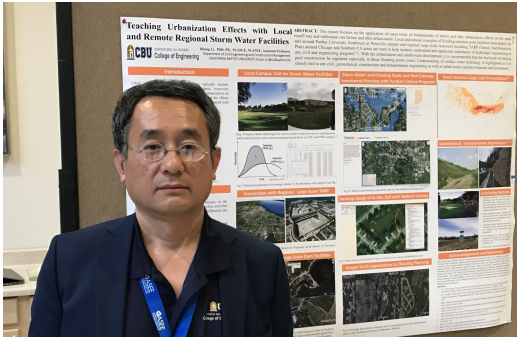
Faculty Highlights

Dr. Jong-Wha Bai

Dr. Bai is a professor of civil engineering and construction management with a commendable expertise in Bayesian modeling and structural safety. He has co-authored research on *Hierarchical Bayesian models with subdomain clustering for parameter estimation of discrete Bayesian network* featured in "Structural Safety, Volume 114" and *Risk Assessment of Damaged Structural Systems under Aftershocks Using a Hierarchical Bayesian Model*, presenting at major conferences such as the 18th World Conference on Earthquake Engineering. Dr. Bai enjoys actively engaging in STEM outreach, serving on research panels at Eastvale STEM Academy and participating in events like the CBU CECM Summer Camp, where he helped introduce younger students to the engineering world. Additionally, he contributed to the KSEA South-Western Regional Conference and was involved in the Gingerbread House Shakedown, an educational initiative promoting engineering principles.

Dr. Jiliang Li

Dr. Li recently gave several presentations during the Spring 2025 semester, both locally at California Baptist University (CBU) and nationally at the ASTM International Symposium in Houston, Texas. His presentations included: "Soil Shear Strength Strip Loading Test Method," at the 2025 ASTM International Symposium on Shear Testing of Soils, sponsored by ASTM Committee D18 on Soil and Rock, held January 29–30, 2025, in Houston, Texas; "National Geodetic Survey Coordinate Conversions and Transformations (NCAT) Web-Based Tool (Practical Exercise to Understand X, Y, Z's, in the Celestial Heavens)," co-presented with Humberto Gallegos at the CBU Innovative Classroom Technology Showcase on January 7, 2025; "Teaching Urbanization Effects with Local and Remote Regional Storm Water Facilities," at the ASEE Pacific Southwest Section (ASEE-PSW) Conference, held April 10–12, 2025, at Cal Poly Pomona; and "Connection of the Teaching, Learning and Instructions of Basic Mechanics and Applied Mechanics Alignment and Optimization," co-presented with Jinyuan Zhai at the upcoming Engineering Mechanics Institute 2025 Conference (EMI 2025), to be held May 27–30, 2025, in Anaheim, California. Dr. Li received four certificates for his participation and presentations at academic conferences since Fall 2024.



Dr. Humberto Gallegos

Dr. Gallegos seeks to build research capacity at CBU for faculty and students while conducting hands-on physical modeling and computer simulations studies regarding water resources systems and land development projects. Dr. Gallegos' passion lies in structural hydraulic-damage modeling, predicting flood extents, investigating and predicting hydrologic cycles, river restoration and dam break simulations. In addition, he is currently a faculty mentor for CBU's ASCE club, specifically focused on supporting the land surveying team. As a mentor, Dr. Gallegos provides technical support while fostering leadership development among club members. Furthermore, Dr. Gallegos is currently developing a minor in Geo-Spatial Engineering and 3D Mapping. The intent of this program is to focus on skill sets that support students' knowledge in acquiring, analyzing, and visualizing real time 3D data for the purpose of managing critical infrastructure and while analyzing Earth's natural resources such as its water bodies and lands.

Student Spotlight - Jonathan DeWit (Civil Engineering)



Who Jonathan Is

Jonathan DeWit graduated from California Baptist University in April 2025 with dual Bachelor of Science degrees in Civil Engineering (BSCE) and Mathematics (BS). Throughout his time at CBU, Jonathan maintained a 3.98 GPA and graduated Summa Cum Laude.

Over the past two summers, he interned at Cozad & Fox, Inc., a civil engineering firm based in his hometown of Hemet, California. In March, he successfully passed the Fundamentals of Engineering (FE) Civil Exam and is currently in the process of obtaining his Engineer-in-Training (EIT) certification from the state of California. Looking ahead, Jonathan plans to gain hands-on experience in the engineering field while pursuing graduate studies in the fall.

Jonathan's passion for numbers began early. From a young age, he found joy in counting and solving puzzles, which naturally evolved into a love for mathematics. He thrives on the challenge of finding the most efficient way to solve problems. Jonathan chose Proverbs 3:19 as his verse because he loves how mathematics helps us understand God's divine creation.

Reason for Choosing Civil Engineering at CBU

Jonathan chose to major in civil engineering to apply his mathematical skills to real-world challenges. Along the way, he found himself so drawn to the math courses in his engineering program that he decided to pursue a second major in mathematics. Now, he's excited to take the next step in his journey—applying his passion for mathematics and engineering to make a meaningful impact in the world.

“The Lord by wisdom founded the earth; by understanding he established the heavens.”

Proverbs 3:19 (ESV)



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Student Spotlight- Jose Delgado

(Construction Management)



Who Jose Is

Jose Adrian Delgado is a first-generation college student graduating from California Baptist University with a Bachelor of Science degree in Construction Management. Throughout his academic journey, Jose overcame numerous challenges that came with being the first in his family to attend college. Despite limited guidance in navigating college admissions and financial aid, he persevered and is grateful for the support he received at CBU, where he found both a strong community and direction for his future.

Jose has gained practical industry experience through internships with PCL Construction over the past two summers. During his time with the company, he contributed to major projects including the Crypto.com Arena in Los Angeles and the North Orange Community College District. In his senior year, he continued building his field experience through a part-time internship with PCL at the Santa Ana Library. These opportunities have fueled his passion for construction and equipped him with the hands-on skills needed to succeed in the industry.

Reason for Choosing Construction Management at CBU

Jose chose to major in construction management to turn his interest in building and leadership into a lifelong career. His time at CBU not only solidified this path but also connected him with a network of mentors and peers through the AEC (Architecture, Engineering & Construction) Club—an organization that played a key role in helping him land his first internship and build lasting relationships. Looking ahead, Jose's ultimate goal is to earn his General Contractor's License and start his own construction company. With faith and determination, he is committed to making a meaningful impact in the construction industry.

“Be strong and courageous. Do not be afraid or terrified because of them, for the Lord your God goes with you; He will never leave you nor forsake you .”

Deuteronomy 31:6 (NIV)

CBU ASCE proudly participated in the 2025 Pacific Southwest Symposium, hosted by Cal Poly Pomona, competing alongside 14 universities in a range of technical and nontechnical events. The Steel Bridge team, known as the “Quacksmiths,” delivered a standout performance, earning 3rd place in Aesthetics with their plasma-cut duck-themed bridge, which held over 1225 lbs during testing. Meanwhile, the Concrete Canoe team showcased a bold “Sir Lancelot” theme and a strong technical foundation despite being unable to race due to surface pigment issues.



In their inaugural appearance, the Environmental Design team presented a conceptual water reuse system, narrowly missing the top ten. The Transportation Design team earned 8th for their proposal of the Brightline West Station, and the Surveying team demonstrated technical skill with a 9th place finish. The Timber Strong team tackled a two-story structure build, gaining valuable experience in structural design.

Additionally, CBU’s president authored a paper on engineering ethics for the Mead Paper & Presentation, while the soccer and basketball teams represented CBU with grit and sportsmanship. These achievements reflect CBU ASCE’s growth, resilience, and vision for even greater success in the years to come.



Throughout the year, and PSWS specifically, students had the opportunity to network with one another and potential employers. Students were able to learn and grow from their experiences together as a team.





This year, the AEC Club continued to grow as we focused on professional development, competitions, and hands-on learning experiences. This school year, we took three teams—Preconstruction, Commercial, and Design-Build—to the ASC Reno Competition, with eight students per team for a total of 24 participants. These teams worked closely with industry coaches from Swinerton, Flatiron, and Whiting-Turner, practicing and preparing throughout the fall and spring semesters leading up to the competition. We also increased our club membership by 5% each semester and expanded our networking opportunities. We hosted multiple Lunch & Learn events each semester with general contractors, architects, and engineers. In addition, we coordinated 1-2 job walks in collaboration with contractors, giving students the chance to experience active construction sites. This past year, our chapter was proud to attend the AGC Construct Conference, an annual tradition since 2019 where we send five students to represent CBU. We also partnered with AGC to offer OSHA 10-Hour Training during both the fall and spring semesters, with plans to train 60 students across three sessions next year. Other club highlights included a resume workshop, multiple Q&A sessions with professionals, site visits, and fun team-building activities like our Spaghetti Tower Challenge. We're excited to continue building momentum and creating new opportunities for our members in the year ahead.

Our commercial team competed in the Reno Competition, developing a proposal for a \$48.6 million, five-story parking garage with a pedestrian bridge. Our team's tasks included cost estimating, scheduling, site logistics, safety planning, and work coordination. A key challenge we as a team faced was creating a detailed schedule within 16 hours, which sharpened our efficiency under pressure. The competition strengthened our teamwork and presentation skills while providing valuable industry exposure. We all highly recommend it to Construction Management students, as it offers hands-on experience with real-world challenges and networking opportunities that can lead to internships and full-time jobs.



The Pre-Con Reno competition project involved redeveloping an 8-story mixed-use building, including a hotel/timeshare, by retrofitting a 4-story retail structure. The \$150 million project featured structural steelwork, a two-story underground parking garage, and a mat foundation, overcoming challenges like groundwater and buoyancy forces. Our team created a detailed bid proposal, addressing cost estimation, scheduling, site layout, safety, construction sequencing, risk management, and logistics. This experience improved our problem-solving, preconstruction planning, and ability to perform under pressure, deepening our understanding of large-scale construction. We strongly recommend the Reno competition to construction management students for its practical experience, professional development, and networking benefits.

The Design-Build Reno competition tasked our team with designing a 50,000-sf student learning facility at Mira Costa College, revealed on competition day as a "flagship structure" in the western U.S. With a \$55 million budget, we aimed for constructability, aesthetics, and LEED Gold standards, delivering a cost estimate, a schedule (March 14, 2025–September 30, 2027), and a site logistics plan for efficiency and safety. Our final Project Management Plan outlined our design and methodology. The experience honed technical skills, teamwork, and communication—especially with architects—teaching us collaboration across disciplines. We recommend Design-Build to CM students for its real-world relevance, though it requires serious effort to excel.



Industry Sponsors & Coaches for PSWS & Reno Competitions

We sincerely appreciate the time, effort, and expertise provided by our incredible coaches. Your guidance and mentorship have been invaluable to our team's success in the Reno Competition! We would also like to extend our heartfelt thanks to the PSWS sponsors. Your generous support made it possible for us to participate in this unforgettable experience, and we are truly grateful for the opportunities you've helped create for our teams.

PSWS Sponsor: 4Creeks Inc.



PSWS Sponsor: Altec



Reno Competition



Commercial Team Coach:

Pinner Construction & TIS Construction

Design Build Team Coach:

Whiting-Turner Co.

Preconstruction Team Coach:

Swinerton



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Department Outreach Programs

SUMMER CAMP

CBU's Civil Engineering and Construction Management (CECM) Department hosted the 2024 CECM Summer Camp from July 16 to 18, welcoming 26 students from fifth to eighth grade. Led by five CECM faculty members, the camp introduced participants to STEM through activities such as fluids lab, building information modeling, surveying, and shake table testing.



GINGER- BREAD HOUSE

CBU's Gingerbread House Shakedown challenged high school students to build gingerbread houses and test their durability on an earthquake simulator, fostering interest in engineering and STEM. Led by Dr. Jong-Wha Bai, the event featured mentorship from CBU's ASCE student chapter, industry judges, and awards for strength, height, decoration, and team spirit.

SHAKEDOWN



HIGH SCHOOL SURVEYING CAMP

On March 8th, the CECM department participated in a Boys and Girls Scouts Surveying merit badge event, where scouts explored land measurement and its connections to mathematics. The event featured hands-on activities with basic surveying tools and GPS measurements, teamwork exercises focused on quality control, a presentation on legal aspects of boundary surveys, and concluded with a pizza luncheon.



CE & CM Testimonials

"I have been recruiting interns for over 20 years at different schools, and CBU students stand out due to their moral character and professional approach to their work. They present themselves well and understand the importance of serving clients, which is crucial in our service-based organization. We naturally align with purpose, as our mission is to serve by shaping futures, and CBU instills in its students the ability to find and develop their skills to live out their purpose in the world.

At any given moment, we have several CBU interns, and our intern program serves as the primary source for recruiting starting project engineers into our organization. In fact, our previous president began as an intern here 39 years ago. Over the years, I believe we have recruited more than 10 CBU alumni, and we will continue to seek out CBU graduates as future candidates. We feel blessed to serve clients who request our services and look forward to welcoming more talented individuals from CBU into our company."

- Jason Howarth



Jason Howarth
Project Executive
Tilden-Coil Constructors



Ryan Gibeault P.E., Owner
Dam Safety Services
Class of 2018

"The CBU Civil Engineering program equipped me with a robust foundation in engineering knowledge and practical skills vital for my career. Through department connections and faculty mentorship, I gained access to valuable internships, applying my learning in real-world settings beyond the classroom. The program's focus on hands-on project development—highlighted by opportunities like the Pacific Southwest Conference (PSWC) and the senior capstone project—allowed me to hone my abilities in solving complex, multidisciplinary engineering challenges, making my time at CBU truly impactful to my career as a Civil Engineer." - Ryan Gibeault

"I graduated from California Baptist University in 2020 with a Bachelor's in Construction Management. I chose CBU because it was local, faith-based, and had a welcoming environment. Honestly, I picked CM not knowing what career I wanted at 18—it felt random at the time, but looking back, I wouldn't change a thing. The program was informative and gave me knowledge that could lead to success in many areas of the construction industry. The professors were compassionate and understanding, always providing the support and resources I needed, even while balancing a full-time job. Thanks to CBU's strong reputation in the industry, I landed a job at a reputable GC. The values I built at CBU have helped me earn trust and respect among my colleagues, and the education I received makes me a valuable asset to my team. I'm truly grateful for the path I chose with CBU."

- Leo Chavez



Leo Chavez
Project Engineer
Erickson-Hall Construction
Class of 2020

Industry Advisory Council

“The CBU CE&CM Industry Advisory Council (IAC) plays a critical role in shaping the future of the Civil Engineering (CE) and Construction Management (CM) programs at California Baptist University. By bringing together a diverse group of industry leaders, the IAC provides valuable insights into emerging trends, challenges, and opportunities within the field. This collaboration ensures that the department’s curriculum remains relevant and aligned with industry standards, helping students gain the skills necessary for success in their careers. The IAC also fosters connections between students, faculty, and professionals, enhancing the university's role in preparing the next generation of engineers and construction managers.

As chairperson, I am committed to further strengthening the relationship between the IAC and the CE&CM programs. In the coming year, I plan to focus on expanding our network of industry partners, facilitating more hands-on learning opportunities for students, and continuing to provide feedback to improve the department's offerings. By working together, we can ensure that the CE&CM programs remain at the forefront of innovation and excellence, providing our students with the tools they need to excel in a rapidly evolving industry. “

-Kevin Terry, the advisory council chair



Kevin Terry, CCM
President & CEO
Tovey Shultz Construction



Current members of the IAC

- David McMillan, County Surveyor, County of Riverside
- Jeff Meiter, CEO/ President, Valued Engineering
- Richard O'Neill, Associate Principal, Rick Engineering
- John Rogers, Senior Civil Engineer, Inland Empire Survey & Engineering
- Jason Uhley, General Manager, Riverside County Flood Control
- Timothy Glaser, Director– Project Controls, Skanska
- Rean Kailiuli, Deputy Project Director, Astaldi Construction
- Matt Kraus, Partner, Lester & Cantrell LLP
- Jay Hover, Senior Project Manager, Perera Construction
- Jason Howarth, Program Executive, Tilden– Coil
- Tom Howell, Principal, Holt Architecture
- Robert Stockes, Regional Leader, DPR Construction

Students' Achievement

'25-26 American Council of Engineering Companies of California (ACEC) Scholarship Recipients

- Kaleb Limtiaco, CE student
- Oscar Macias, CM student
- Garrett Westwick, CE student



'24-25 COE Scholarship Winners

- | | | |
|--------------------------------|-------------------------------|--------------------------------|
| • Isaac Allen, CE student | • Thomas James, CE student | • Alexandra Roche, CE student |
| • William Carney, CE student | • Anthony Macias, CM student | • Javier Sanchez, CE student |
| • John Ryan Cogger, CM student | • Daniel Menendez, CE student | • Levi Schain, CE student |
| • Jonathan DeWit, CE student | • Autumn Morlock, CE student | • Theodore Smalley, CE student |
| • Dakota Dodridge, CM student | • Connor Murray, CE student | • Preston Thompson, CE student |
| • Peter Eiles, CE student | • Hank Newlin, CE student | • Andrew Tolentino, CE student |
| • Troy Haun, CE student | • Jonah Olsen, CE student | • Colton Wells, CE student |
| • Brandon Hluchan, CE student | • Avery Raya, CE student | • Garrett Westwick, CE student |
| • Isaiah Hreische, CE student | • Jonathan Reiter, CM student | • Kaden Yip, CE student |

2025 CBU Engineering Design Showcase



The 2024-2025 CECM capstone projects have been filled with an amazing suite of projects from construction management to civil design. The design spectrum ranges from flood control, building and structural design, land development, dam monitoring investigations, water quality and construction management projects. CBU's CECM department is overwhelmingly blessed to facilitate the accomplishments of these projects through the support of 32 seniors and amazing mentors. Final deliverables included a show case poster presentation to CBU's College of Engineering and both a final technical presentation & report. Each project required the usage of both hard and soft skills.



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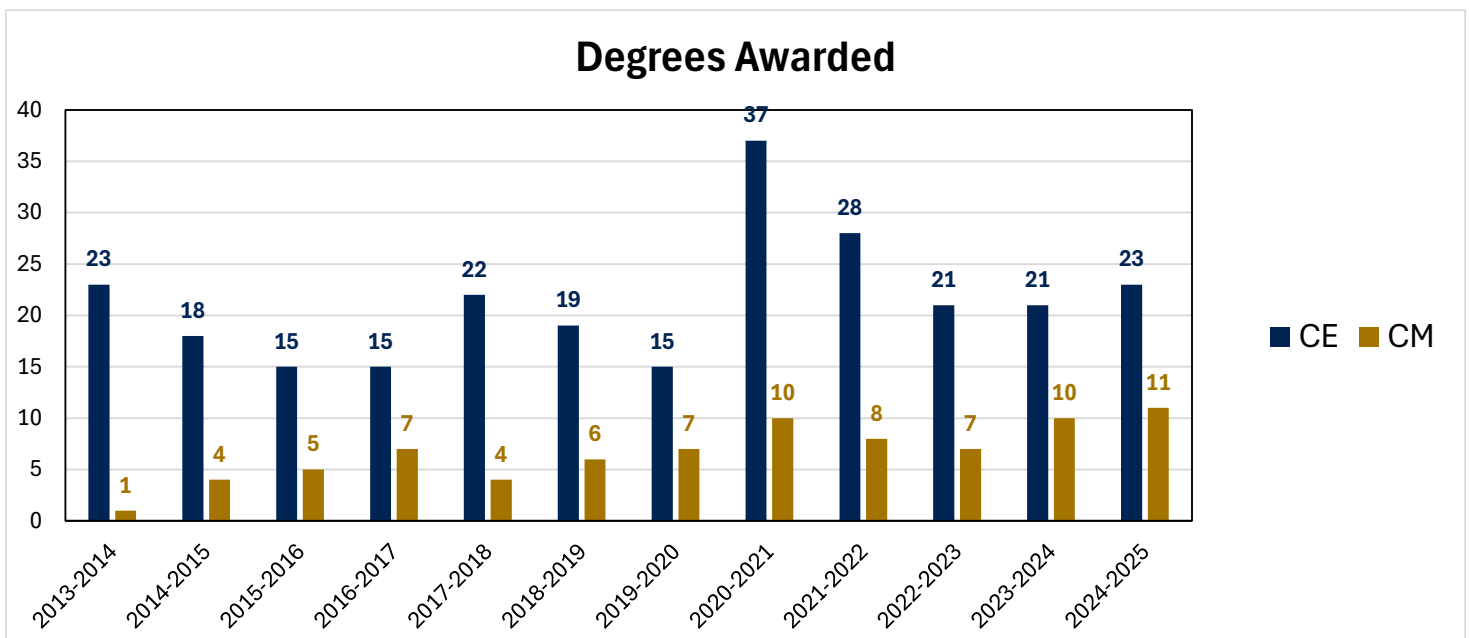
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Congratulations on Graduation!

The Department of CE&CM celebrated graduation of 23 CE and 11 CM students in 2024-2025.



"For we live by faith, not by sight." - 2 Corinthians 5:7



Want to be learn more about our programs?



CE Program



CM Program



CM *LinkedIn* page

Upcoming Events

- July 15-17 CECM Summer Camp @CBU
- October 8th, 2025 - CBU Engineering Fair
- October, 2025 - ACCE accreditation team visit for the CM program
- November, 2025 - CECM Industry Advisory Council Fall Meeting
- December, 2025 - CBU Fall 2025 Commencement
- December, 2025 Gingerbread House Shake-down
- February 2026 - ASC Regions 6 & 7 Student Competition at Nugget Casino Resort in Sparks, NV
- April, 2026 - Pacific Southwest Symposium (PSWS) @ California State University, Los Angeles
- April, 2026 - CBU Spring 2026 Commencement

Make a Gift

I would like to partner with CBU's Civil Engineering & Construction Management Program!

I would like to invest a recurring gift of:

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☐ Other \$ _____

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8432 Magnolia Avenue

Riverside, CA 92504

**If you prefer to give online, please go to www.calbaptist.edu/*



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Accreditation

The CE program is accredited by Accreditation Board for Engineering and Technology (ABET), and the CM program is accredited by American Council for Construction Education (ACCE).



Engineering
Accreditation
Commission



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