



CCCE STUDENT

2015-2016 Student Newsletter

IOWA STATE UNIVERSITY
Department of Civil, Construction
and Environmental Engineering

WHY YOU SHOULD

ENGINEER HERE

Do you want a career solving the world's engineering challenges? If so, you belong at **Iowa State's Department of Civil, Construction and Environmental Engineering (ISU CCEE)**.



Our department boasts two outstanding programs of study: civil and construction engineering. In our civil engineering program, you'll work one-on-one with experienced faculty in class and through undergraduate research. Our civil engineering program **ranks no. 12 among public universities in the nation** by "U.S. News & World Report." This could be due to our first-year learning community, our hands-on courses, or our award-winning student organizations. All lead to a **99 percent job placement rate for civil engineering students** at six months post-graduation.

Visit our undergraduate advising center for more information, or check out the link below to schedule an appointment. Our advisers answer questions about the engineering field and can advise high school course planning. We will connect you to a variety of opportunities and resources across ISU, including: **scholarships, study abroad opportunities, and student organizations**. Your adventure starts here, so let us help you plan your success at ISU CCEE!

Wendy Robinder-Coordinator of ISU CCEE Advising Center and Civil Engineering Adviser



Here at Iowa State University, our construction engineering program stands out. Our **learning community** matches you with peer mentors and helps you meet fellow students and get to know campus. It's also a gateway to involvement in many **departmental and intercollegiate student organizations**. In each organization, you'll connect with faculty, alumni, and industry partners.

Our **ABET-accredited program** boasts faculty with industry experience (many of whom are licensed professional engineers). They are dedicated to teaching, advising, and mentoring you during your time at Iowa State. With this guidance, many students are able to secure one or more internships prior to graduation. To top it off, our construction engineering program's **placement rates are the highest of any engineering major** at Iowa State University – 100 percent at the six month post-graduation mark. Full-time job offers average \$60,000 and include nationwide positions like construction project engineers, construction managers, construction superintendents, and design engineers! Come to ISU CCEE and become a leader in construction engineering.

Beth Hartmann-Construction Engineering Senior Lecturer and Adviser

Questions? Our advisers can help.

Check out **www.ccee.iastate.edu/academics/advising/**

Schedule an advising appointment, find registration and graduation materials, and explore engineering learning communities. Call **(515) 294-9926**, stop by 382 Town Engr. Building, or email **cceeadvising@iastate.edu** to get started.

The Organization

Associated General Contractors (AGC) is a highly-dedicated construction engineering (ConE) student chapter that contributes its time, effort and construction skills locally and nationwide. AGC was recently awarded the **AGC Student Chapter of the Year Award** as a direct result of students' volunteered time and hard work.

Through connections with AGC of Iowa and Master Builders of Iowa, jobsite tours and monthly meetings, student members have every opportunity to get involved in the industry. This creates an excellent professional network. If you are interested in being a part of construction engineering's largest student organization and making great friends along the way, AGC is for you!



Photo by Larry Cormicle

How to Get Involved

General Meetings: First Wednesday of every month at 7:00 p.m.
in 1414 Molecular Biology Building. Food provided.

Organization Contact: Jack Finn at jmfinn@iastate.edu

Quick FAQs

www.facebook.com/isuagc/



@isuagc



Iowa State AGC recently received its 10th first-place finish as Outstanding Student Chapter, awarded by the national branch of Associated General Contractors

Online at:

stuorgs.engineering.iastate.edu/agc/home/

CCEE students substitute **AGC service trip** for spring break

By Kate Tindall
June 16, 2016

Leaky roofs, chipping paint ... Jack Viverito paints a vivid picture of houses devastated by storms in Oklahoma City.

"You could just see, some of the houses were a complete mess," Viverito said.

The construction engineering graduate says tornadoes from 2013 and floods from 2015 left homeowners without insurance to pay for damages. That's where Associated General Contractors (AGC) comes in.

For years now, members of the ISU chapter of AGC have been trading in their fall and spring breaks for service trips. Viverito recently served as vice president of the group. He helped organize his seventh and final AGC service trip. The group's work broke down to a total of more than 1,200 hours of labor.

Viverito added that 28 AGC members volunteered for the trip (held March 13-17). Group members built four houses. This included roofing, drywall and flooring projects.

Senior Lecturer Larry Cormicle advises the group. He says it's critical to give students responsibility on the trips, and it's just as important to have constant service opportunities.



"I think the opportunity for all our students is to learn how it feels to help another human being in a time of desperate need," Cormicle said.

Whether it's Oklahoma, Eastern Tennessee or Central Illinois, Viverito says service trips are a staple of the AGC experience at ISU.

"We're always going to find something to do for every fall break and every spring break we can," Viverito said. "We love it. We're just not going to stop."



AGC members complete work on a roofing project (top right) and siding projects (left)
Photos courtesy Jack Viverito

"We love it. We're just not going to stop."

*Former ISU AGC Vice President Jack Viverito
on the participation of ISU AGC Student Chapter members in service opportunities*

The Organization

Joining the American Society of Civil Engineers (ASCE) is a great way to learn about civil engineering at Iowa State University. Our student chapter hosts frequent speakers, outreach events, and socials to keep members involved. During speaker visits, practicing professionals in the civil engineering field present projects on which they've worked, and students are able to ask questions and take advantage of networking opportunities. Social and outreach events allow the students to meet new friends in the civil engineering program.

As a member of ASCE, students have the opportunity to join **Iowa State's Steel Bridge or Concrete Canoe** teams for hands-on experience and applications of civil engineering. In addition to all of this, ASCE takes its members on field trips each semester to visit industry-related job sites in major Midwest cities.



Photo courtesy The Walsh Group

How to Get Involved

General Meetings: Members are notified via email of meeting times and locations. Join the club's email list and learn about membership by emailing Alec Albright (below).

Organization Contact: Alec Albright at alec18@iastate.edu

Quick FAQs

Dues: \$15 per semester
(waived for first semester members)

Join the open group
ASCE Iowa State
Student Chapter 2016-2017



(Above) ASCE members take a trip to Chicago to visit a high-rise luxury apartment building under construction

Online at:
stuorg.iastate.edu/site/ASCE

Concrete Canoe hosts regional competition

By Kate Tindall
June 1, 2016

ISU Concrete Canoe Co-Captain Abdullah Abdullah knows how to inspire recruits.

"We have a project, a due date," Abdullah said. "We have to finish it before the due date. We are representing [Iowa State University], so we have to have a really good final product."

This spring, the ISU chapter of the American Society of Civil Engineers (ASCE) Concrete Canoe competition team hosted the **Midwest Concrete Canoe Competition** at Don Williams Lake near Boone, Iowa. Every year the team competes against schools from Minnesota, North and South Dakota, and Iowa.

There is racing at the competition. But not all events are created equal. Concrete Canoe Adviser and ISU CCEE Associate Professor Tim Ellis says a large portion of the competition is based on presentations and technical papers. Both are submitted before the contest begins. A process display is required as well.

"You could win the competition without knowing how to hold a paddle in your hands," Ellis said.

In the men's slalom/endurance race, the team took second place.



Photo courtesy Abdullah Abdullah

ASCE student chapter earns recognition for "outstanding activities"

By Kate Tindall
July 20, 2016



This spring, members of ISU's ASCE Student Chapter received news that the national ASCE Committee on Student Members had recognized ISU's chapter with a **Letter of Honorable Mention**.

According to ASCE, ISU's student chapter received the recognition for "its outstanding activities." Senior member Erica Mack has been in ASCE since her first week at ISU.

"All the people that are in [ASCE] are passionate about the same thing that you are passionate about," Mack said. "That's really nice to have that kind of environment surrounding you."

(Above, left) ISU ASCE Student Chapter members tour ISU steam tunnels
Photo courtesy Erica Mack

The Honor Society

Chi Epsilon provides many opportunities for its members to experience personal growth at Iowa State University. To be eligible for Chi Epsilon, you must be a junior or senior in the top third of your class (based on grade point average). You must also be initiated before becoming a full member.

As the **only national civil engineering honor society**, Chi Epsilon offers national academic recognition that can be invaluable for interviews and other professional interactions. The Iowa State Chapter of Chi Epsilon currently offers nine cabinet positions full of leadership experience. The cabinet plans community service, socials, and other events. This includes an annual camping trip that allows students to network and give back on a local level.

If you want to get involved in your community, gain leadership experience and be recognized for your academic success, Chi Epsilon is a great organization for you.



Photo by Kate Tindall

(Left) Former ISU Chi Epsilon Chapter President Harold Bridges (center) and current chapter members at 34th Annual Civil Engineering Fall Banquet

General Meetings:

Cabinet meetings take place once every two weeks in Town Engr. Building. Chapter events take place about once a month.

Organization Contact:

Chris Levandowski at chrislev@iastate.edu

How to Get Involved

Quick FAQs

Eligibility: Junior or senior class standing and in the top third of class

Search for the page

"Chi Epsilon-Iowa State University"



Online at:

stuorgs.engineering.iastate.edu/chi-epsilon/

The Organization

The Civil Ladies host multiple events. These can include socials, volunteering opportunities and guest speakers. Past social events include everything from ice skating to movie and game nights. We also have helped the community by volunteering, have made blankets for those in need and have cleaned Iowa State's campus during Cy's Day of Service.

We visit engineering companies, go on job site tours, and host guest speakers to teach us about their experiences at their companies or assist with resume and interview preparation. This is a great club to **help women make connections and learn about their future job options** while having fun and helping others.

(Right) This year's cabinet members of the Civil Ladies



Photo courtesy Shelby Ellis

How to Get Involved

General Meetings: Meetings include events and are generally held in Town Engr. Building.
Contact Shelby Ellis (below) for information.

Organization Contact: Shelby Ellis at sellis@iastate.edu

Quick FAQs



facebook.com/civil.ladies/

Did you know ...

Find organizational news on ISU CCEE's Facebook page

www.facebook.com/isuccee



The Organization

Our organization is a student chapter of the Design-Build Institute of America professional organization. We hold monthly general meetings where our members learn about design-build best practices from industry professionals.

Along with these meetings, DBIA holds several other great networking events, such as job site tours and socials with the DBIA Iowa professional organization. The student chapter sends several students to the **DBIA Conference and Expo** each year. Our student chapter participates in the **DBIA National Student Competition**, where we recently earned a first place finish as Midwest Region champions, and where we have placed in the top ten nationally for the past two years.



Photos courtesy Lauren Bennett

How to Get Involved

General Meetings: General meetings in 322 Town Engr. Building.
Start time 7 p.m. on second Tuesday of the month.

Organization Contact: Lauren Bennett at laurenb@iastate.edu

Quick FAQs

Fall 2016 Meetings: Meetings held monthly

(Above) ISU DBIA Student Chapter members on a tour with Ryan Companies in downtown Des Moines

@isuDBIA



Online at:

stuorgs.engineering.iastate.edu/dbia/

Iowa State **extends winning reign** at Midwest construction management competition

By Chris Neary
Nov. 12, 2015



Iowa State University construction engineering students won three divisions in the **23rd Annual Associated Schools of Construction (ASC) Region IV Construction Management Student Competition**. The event was held Oct. 21-24, 2015, in Nebraska City, Neb.

Iowa State won the commercial, design-build and heavy-highway divisions, and placed second in the specialty contracting division. Team members competed among more than 160 students from 28 university teams based in Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota.

"This competition completely confirmed my choice to go into construction," said Mackenzie Alberts, captain of Iowa State's design-build team. "This is exactly what I want to do with my life."



Competition teams are (clockwise from top right) Commercial Division Team, Design-Build Division Team, Specialty Contracting Division Team, and Heavy-Highway Division Team

Each team was given 18 hours to schedule, estimate, and resolve several surprise management issues on given project scenarios. Each division was given a different mock request for proposal, or RFP, on a real project. Each team then gave a presentation to a panel of industry judges, who rated the mock proposals.

Iowa State builds on a legacy, as its team has placed first more than 40 times in the ASC competition's history.

"We have truly great students who accept the challenge and prepare to win every semester," ISU CCEE Senior Lecturer Larry Cormicle (BSConE'78, MSConE'10), said.

Senior Richard Van agreed with Cormicle. "Students in construction engineering are held to a high level of professionalism, as if they are already employed by a Fortune 100 construction firm,"

he said. "We are pushed to our limits to ensure that, when we leave Iowa State, we are more than prepared to begin our careers."

**"This is exactly what I want to do
with my life."**

ISU CCEE Construction Engineering senior Mackenzie Alberts
after attending ASC's Region IV Student Construction Management Competition

The Organization

If you are interested in structural and geotechnical engineering, personal and professional development, and fun (of course), then the Earthquake Engineering Research Institute (EERI) is the perfect club for you!

Our main activity for the year is the **Undergraduate Seismic Design Competition**. In this competition, we compete internationally using a 27-story, earthquake-resistant balsa wood building that we design, analyze, and construct. It is important for us to be involved with the community around us. Throughout the year we host and participate in multiple outreach and community events. We also host visiting scholars and industry professionals who share their leading research and engineering experiences. For more information, look for us online or contact us by email (information listed below).



In April, ISU EERI members competed in the Undergraduate Seismic Design Competition. They finished ninth out of more than 30 university teams.

Photos courtesy Bin Cai

How to Get Involved

General Meetings: For more information on meetings or how to get involved with EERI at Iowa State University, please contact Bin Cai at the email listed below.

Organization Contact: Bin Cai at binc@iastate.edu

Quick FAQs

facebook.com/eeri.iastate/



@EERI_IowaState



Photos (from left): EERI competition team represents ISU in San Francisco, Calif.; EERI members host outreach event in Ames community

Online at:

stuorgs.engineering.iastate.edu/eeri/

The Organization

The goal of Iowa State University's Mechanical Contractors Association (ISU MCA) is to develop and support an interest in the specialty trades of mechanical construction. The student chapter is associated with the **Mechanical Contractors Association of Iowa (MCAI)** as well as the **Mechanical Contractors Association of America (MCAA)**.

Our objectives include promoting relationships between students and contractor members and expanding students' knowledge of the mechanical industry, along with promoting fellowship between student members and the professional societies that serve the industry. Through this direct connection to industry members, our students are able to differentiate themselves and to successfully approach fulfilling internships and full-time positions.



ISU MCA members host outings including (left) the 2015 MCA Student Golf Outing

Photos courtesy Scott Miller

How to Get Involved

General Meetings: Meetings are held on the second Monday of each month at 6:30 p.m. in Town Engr. Building. Contact Scott Miller (below) for monthly e-mails with meeting room locations.

Organization Contact: Scott Miller at scottmi@iastate.edu

Quick FAQs



facebook.com/iowaStateMcaStudentChapter

Online at:

stuorgs.engineering.iastate.edu/mca/

(Above right) 2015-2016 MCA Leadership
(from left) Pete Christiansen, Joe Kern,
Brandon Ophoff, Bryan Marroquin,
Scott Miller, Marcelious Wyatt

ISU MCA awarded 2016 Chapter of Excellence Grant, plans scholarship opportunities

By Kate Tindall
Aug. 10, 2016

Scott Miller's final semester at Iowa State University (ISU) is all planned when it comes to course schedules. But the construction engineering senior knows that some lessons lie outside the classroom.

"All the professors I've had, they've always emphasized it's about who you know," Miller said.



Last month, ISU MCA received news that the **Mechanical Contractors Association of America (MCAA)** Career Development Committee had awarded the group a **2016 Chapter of Excellence Grant**.

As the ISU organization's president, Miller knows the importance of the recent award. He has had the chance to network with MCA contractor members at career fairs, through industry nights and at socials. Those are all reasons he first joined the organization.

"It's all about networking, and MCA provided all kinds of opportunities for me to network," Miller said.

Brad Perkins is a senior lecturer at ISU's CCEE Department and serves as ISU MCA's faculty adviser. He says it takes a focused engineer to be part of ISU MCA.

"The ones in MCA are more narrowly focused in their degree plan and probably what they're going to do when they leave here," Perkins said of members.

ISU MCA was awarded \$5,000 from the MCAA Career Development Committee. Perkins says that money will support academic scholarships for the organization's students.

"It is going to really set us up [well] for this year to provide amazing opportunities for those students that are interested in the mechanical side of construction," Miller said.

Above left: MCA members represent their organization at the annual CCEE Fall Picnic
Photo by Chris Neary

**"It's all about networking,
and MCA provided all kinds of opportunities
for me to network."**

*ISU MCA President Scott Miller on opportunities gained
through involvement in MCA*

The Organization

The National Association of Home Builders' (NAHB) goals are to donate more than 400 hours of community service back to the Ames community in the form of the following: building park shelters, demolishing and reconstructing broken picnic tables, and working on building projects for Habitat for Humanity. The student organization also likes to have fun with multiple socials, such as grill-outs, bowling at Perfect Games, and even an overnight tour (usually up in the Twin Cities).

This year, our goal is to become the **NAHB Student Chapter of the Year**! The club is expecting to expand throughout the course of the year, but NAHB is still small enough to get to know familiar faces.



Members of NAHB enjoy community volunteer projects, socials, and a variety of service opportunities

How to Get Involved

General Meetings: ISU's NAHB general meetings take place monthly in Town Engr. Building. Meeting agendas contain guest speakers, upcoming community events, social events, and tours.

Organization Contact: Dylan Busby at dabusby@iastate.edu

Quick FAQs

Community Service: Goal of donating 400 hours of service this year



facebook.com/iastateNAHB/

Online at:

stuorgs.engineering.iastate.edu/nahb/

Above (from left): NAHB members take a tour with Drake Homes, LLC. in Minneapolis; Members construct shelter buildings at Moore Memorial Park

The Organization

The Iowa State University National Electrical Contractors Association (ISU NECA) Student Chapter is a great club for students that are looking for a fun group of upcoming professionals. Most members are construction engineering majors with either an electrical or mechanical emphasis. But that does not mean that we are exclusive to those emphases.

We hold monthly meetings, socials and jobsite tours that encourage students to interact with both contractors and fellow students alike. We also participate in the **Green Energy Challenge**, which is a national competition to create a professional proposal to make a building in our community more energy-efficient. In this, ISU NECA has done extremely well, winning first place the last two years. The team traveled to Boston to defend its first-place title in October. There, we became **champions for the third consecutive year of the ELECTRI International/NECA Green Energy Challenge!**



Photo by Kate Tindall

How to Get Involved

General Meetings: Monthly meetings take place the third Tuesday of every month at 6:30 p.m. in 220 Town Engr. Building.

Organization Contact: Caleb Bonderer at bonderer@iastate.edu

Quick FAQs

(Above) ISU NECA Student Chapter members and faculty adviser take a leap outside of Ames' Edwards Elementary, the school which they used for their Green Energy Challenge proposal this year

facebook.com/ISUNECA/



@NECA_ISU



Online at:

stuorgs.engineering.iastate.edu/neca/

Cyclone Energy comes full circle in **Green Energy Challenge**

By Jessi Strawn
March 23, 2016

In 2009, a five-person team of students from Iowa State's Civil, Construction and Environmental Engineering Department decided to participate in the **Green Energy Challenge**. The competition, which is sponsored by the ELECTRI International Foundation, challenges student chapters across the nation to create a proposal for sustainable updates to a building in their community.

Eight years and eight competitions later, the **2016 ELECTRI International Green Energy Challenge** team, which is sponsored by the Iowa Chapter of NECA, is back at Edwards Elementary. It's officially named Cyclone Energy ... and it's on a winning streak.

In 2014, the team placed second in the written proposal. Then, during the trip to the Chicago National Convention, Cyclone Energy got its long-awaited first place win. So, the 2015 Cyclone Energy team buckled down for the written proposal that year. Each team member is estimated to have put more than 100 hours of work into the project. Iowa State's 2015 proposal placed first!

The 2015 National Convention was in San Francisco. The team put hours into perfecting the presentation – including the question and answer sessions. Once again, everyone's hard work paid off.

"We got first place!" Beth Hartmann, faculty adviser to the group, said. Britta Sortland, a December 2015 civil engineering graduate, won best presenter that year.

In 2016, the subject of the competition is "Eco-School Business Development." And there are some (not-so-subtle) expectations: "We want a three-peat," stated Hartmann.

"We know we can do it, and we're doing everything we can to make it happen," construction engineering alumna and past ISU NECA team member Margaret Holt said.



ISU NECA members attend and present at
2015 NECA National Convention
Photos: EPNAC.com

Editor's Note: This October, the team proved successful. They won first place in the **2016 ELECTRI International/NECA Green Energy Challenge**.

"We know we can do it, and we're doing everything we can to make it happen."

Former ISU NECA team member Margaret Holt on the possibility of a third-time first place finish at the 2016 Green Energy Challenge

The Organization

The Transportation Student Association (often referred to as the Iowa State Institute of Transportation Engineers, or ITE, Student Chapter), is an award-winning student organization focused on transportation topics. This is the **parent organization of Iowa State University's ITE chapter** and the Intelligent Transportation Systems of America (TSA) chapter.

TSA fosters education and professional development outside of the classroom through professional speakers and conference attendance. Student networking and STEM K-12 outreach is encouraged for those members who participate in TSA at Iowa State.



(Left) Mock interviews at the first annual ITE Midwest Student Leadership Summit
(Right) Concrete Industry Night, just one event of which TSA members are a part

Photos courtesy Steven Younkin

How to Get Involved

General Meetings: Meetings are held bi-weekly on Tuesdays at 6:00 p.m. in 270 Town Engr. Building. Meetings consist of a dinner and professional speaker.

Organization Contact: Steven Younkin at syounkin@iastate.edu

TSA members get the opportunity to attend one or even two conferences per semester. Members can also expect one conference in the summer months.

Quick FAQs

Official Name: Transportation Student Association (TSA)

Note: ISU's TSA Student Chapter is sometimes cited as the Iowa State ITE Student Chapter

@CycloneTSA



Online at:

stuorg.iastate.edu/site/tsa

The Organization

The Water Environment Federation's (WEF) goals are to expand and share knowledge in order to foster a supremely high quality of available water resources through pollution prevention practices and the design, construction, and maintenance of water treatment facilities.

WEF activities include the following: inviting guest speakers to share their experiences, participating in design competitions, attending club affiliate conferences and workshops, and conducting water quality testing. We also host canoe trips, field trips, and offer peer mentoring. Make sure you check out these activities and more online and at our meetings, or contact us for more information.



Photo courtesy James Alleman

How to Get Involved

General Meetings: WEF typically meets once a month, and the meeting time will be posted two weeks before any meeting (see website information below).

Organization Contact: Yuqi Song at yuqi25@iastate.edu

Quick FAQs

*Wondering when the next meeting of the **WEF** will take place? Want to get involved?*

Check out our organization's website (below) for more information, or email our organization's contact.

Online at:
stuorg.iastate.edu/site/591

Members of WEF at ISU, along with ISU CCEE faculty member James Alleman (back, far left), at the 2015 Water Environment Federation's Annual Technical Exhibition and Conference

IOWA STATE UNIVERSITY

**Department of Civil, Construction
and Environmental Engineering**

Engineering Student Organizations

CCEE Engineering Organizations

American Society of Civil Engineers (ASCE)
ASCE Concrete Canoe Competition
ASCE Steel Bridge Competition
Chi Epsilon (Civil Engineering Honor Society)
Civil Construction Software Club
Civil Ladies
Earthquake Engineering Research Institute (EERI)
Transportation Student Association (TSA)
Water Environment Federation (WEF) Student Chapter
Associated General Contractors (AGC)
Design-Build Institute of America (DBIA)
Mechanical Contractors Association (MCA)
National Association of Home Builders (NAHB)
National Electrical Contractors Association (NECA)
Sigma Lambda Chi (Construction Engineering Honor Society)

Interdisciplinary Engineering Organizations

Engineering Student Council (ESC)
Engineers Without Borders (EWB)
Freshman Leaders in Engineering (FLiE)
Minds of Tomorrow (MoT)
National Society of Black Engineers (NSBE)
Society of Women Engineers (SWE)
The Engineering Ambassador & Mentor Program (TEAM)
Women in Science and Engineering (WiSE)

***For a full list of Iowa State University Student Organizations,
visit www.stuorg.iastate.edu/org-listing***