

CAREER DIRECTIONS FOR STUDENTS IN ARCHITECTURE, CONSTRUCTION AND ENGINEERING

Joseph M. Sanches, MBA Chief Operating Officer





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THE MISSION

To **ENGAGE, EXCITE** and **ENLIGHTEN** high school students to pursue careers in architecture, engineering and construction through mentoring and to support their continued advancement in the industry.







WHY?

- One of America's top economic engines, the integrated design and construction industry faces a serious workforce shortage.
- The retirement of baby boomers is depleting the ranks of the 7 million people employed in the A/E/C industry.
- ACE mentors have inspired thousands of young people to consider and pursue industry careers.

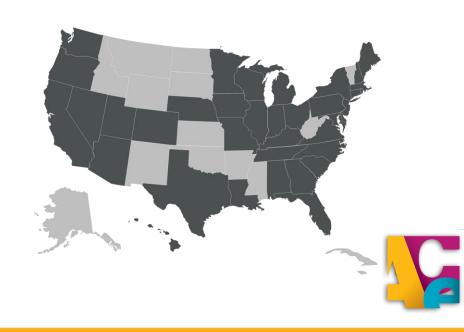




ACE MENTOR PROGRAM of AMERICA

The Network

- ACE's 70 affiliates operate in 37 states, the District of Columbia and Puerto Rico. Most affiliates are based in urban communities.
- Over 12,000 students and about 5,000 mentors each year
- \$3,947,800 awarded in scholarships last year





ACE MENTOR PROGRAM of AMERICA

ACE Palm Beach County and Treasure Coast (Florida)

School District of Palm Beach County

- Atlantic High School
- Wellington High School
- Dwyer High School
- Seminole Ridge High School
- Lake Worth High School
- Palm Beach Central High School
- Forest Hill High School

Martin County School District

South Fork High School

Future Participation

- Okeechobee High School
- St. Lucie Public Schools













WHAT ACE DOES

ACE isn't about merely describing specific professions, it's about immersing students in the profession by engaging them in actual building projects.







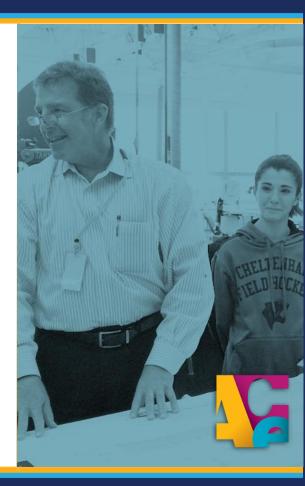




OUR MEETINGS

Professionals meet with a group of Students.

- 14-15 sessions, bi-weekly.
- 7-8 month long adventure.
- Meetings occur in schools, mentor offices, or other locations.
- Through hands-on activities, student teams first learn basic skills and knowledge. They apply this to developing realistic projects in second half of program (geared towards CIRT National Competition).





MEETING AGENDA



PRESENTATION

Brief mentor presentations about topic of session and/or introduction to a particular ACE career path.



ACTIVITY

Hands-on activities and/or working with students on mock design project.



WRAP-UP

Wrap-up – review of session's accomplishments, goals for next session.





CIRT National Design & Construction Competition

- The competition presents **three real-world project challenges** to judge the ability of the students to make **reasoned**, **coherent**, **clear presentations** on their team's design and construction approaches that are realistic and responsive to the project's objectives **within time**, **budget**, **constructability constraints**, etc.
- The competition challenges students to develop **innovative solutions**, **blending architecture, engineering, and construction** management into one exciting project.
- Over the 7-8 months, teams will refine their concepts and prepare to present to industry leaders and compete for top honors.
- The competition was developed in order to introduce additional ways for students to develop valuable skills, and help them gain even more recognition and connection with professionals in the industry.





CIRT National Design & Construction Competition







2026 Challenges

- Net Zero Data Center Design a Net Zero data center that significantly reduces its environmental impact / carbon footprint, and respects the surrounding community
- **Cultural Destination** Design an iconic structure/space/building that elevates an existing destination—enhancing its appeal to visitors while preserving the authenticity and cultural identity that make it valuable to the local community
- Modular/Tech-enabled Build Design a structure that incorporates at least one cutting-edge tech-enabled modular construction technique while clearly demonstrating why and how your solution could be a preferred, sustainable method over standard building practices

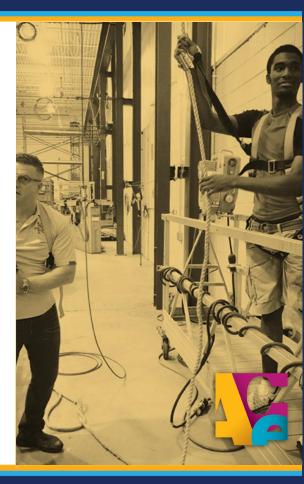




EXPOSURE

ACE offers students a unique experience and opportunity to visit various places associated with the design and construction industry!

- CONSTRUCTION SITES
- MENTOR FIRMS OFFICES
- UNIVERSITY VISITS
- NATIONAL COMPETITIONS
- AND MORE





FIELD TRIPS









FINAL PRESENTATIONS







FINAL PRESENTATION & SCHOLARSHIP NIGHT

















SUCCESS STORIES

Christian Rodriguez-Romero

Student at **South Fork High School** and participated in the ACE program in 2024.

 Now an intern at a mentor firm, Morganti Construction.





2024

Now

Shligton Estime

Student at **Atlantic High School** (Hedrick was his mentor firm)

- University of Florida Graduate –
 BS Construction Management
- Hedrick Brothers Construction Project Manager





Habitat For Humanity House

Seminole Ridge High School - Weitz Construction Academy



Architect & Academy Teacher

Each year for the past 12 years, the students of Seminole Ridge Construction Academy
are taught about construction techniques in all trades as they construct the modular
components of a four room house in the school's shop. The components are then
transported to a waiting foundation and <u>assembled in place</u>. Most of the installation
work is performed by volunteer trades from the community, but the students get to
work on all aspects and gain immense experience.

Financial support provided by Habitat For Humanity and technical support from Weitz Construction, their partners and David Porter Architects.

Www. seminoleridgehabitathouse.com



Habitat For Humanity House

Seminole Ridge High School - Weitz Construction Academy























THANK YOU!

FOR MORE INFORMATION PLEASE CONTACT US!



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