ACE MENTOR PROGRAM OF ALABAMA

# PROGRAM REPORT

# 2022 2023

Sneak Peak of 2023 - 2024 Fall Semester

















# WHAT IS THE ACE MENTOR PROGRAM?

ACE Mentor Program of Alabama is a FREE after-school program for high school students, 9th – 12th, who are interested in a career in architecture, construction, and engineering. Students join teams that are led by mentors currently working in the design and construction industry. Mentors include architects, interior designers, landscape architects, civil and structural engineers, MEP engineers, and construction managers.

Mentors and students meet twice a month throughout the school year at the offices of architects, contractors, and engineers in the Birmingham area. This allows the students to experience the office environment for each industry firsthand. ACE also provides scholarship opportunities for students to further their education within the building design industries.



# **OUR MISSION**

To engage, excite, and enlighten high school students to pursue careers in architecture, engineering, and construction through mentoring and continued support for their advancement into the industry.

PROGRAM STATS

2022 - 2023

23 ACTIVE STUDENTS

25 ACTIVE MENTORS

12 MEETINGS

1 CONSTRUCTION SITE VISIT

### **ACE STUDENTS OF ALABAMA**





ACE IS A UNIQUE CHANCE TO DEVELOP NEW SKILLS, SOLIDIFY FUTURE GOALS & GET ON TRACK TO REWARDING CAREERS.









#### What do students do in ACE?

- Learn what it is like to work in the design build industry.
- Participate in fun hands-on projects to learn A/C/E concepts.
- · Visit construction sites and professional offices
- Meet students from other schools who share the same interests.
- Develop a mock-design project with teammates and mentors.

The ACE Mentor Program of Alabama connects high school students all throughout the Greater Birmingham area; they encompass public, private, independent, and charter schools. Since this is our first year back after COVID, we had a smaller group of 23 incredible students.

PARTICIPATING HIGH SCHOOLS 2022 - 2023

A.H. Parker High School

**Gardendale High School** 

**Hewitt Trussville High School** 

Jefferson County International
Baccalaureate School

**Shades Vally High School** 

Ramsay High School

### **ACE MENTORS OF ALABAMA**





# ACE OFFERS HIGH SCHOOL STUDENTS THE BEST OPPORTUNITIES BECAUSE ACE HAS THE BEST INDUSTRY MENTORS.









#### What do Mentors do in ACE?

- Present engaging industry overviews and lead students in hands-on activities.
- Guide the students through the design and development of a team project.
- Lead a job site visit or conduct a professional office tour.
- Share knowledge: Advise students about college, requirements for entering ACE fields, and career options.

There is no substitute for experience - the ACE Mentor Program is driven by the committed and enthusiastic participation of volunteer mentors who are practicing professionals in their respective fields. This year, we had a wonderful team of 18 mentors from firms all across the Birmingham area that volunteered their time to help build our next generation of ACE Professionals.

#### MENTOR FIRMS 2022 - 2023

Black Design Architecture
Brasfield & Gorrie
Cain Construction Company
Christopher AI
Dix-Hite Landscape Architects
EDT, INC.
Gray Construction
Gresham Smith
GW Engineering
Poole and Company Architects
Robins & Morton
Turnerbatson

### **INTRO TO ARCHITECTURE:**

# ARCHITECTURAL DRAWING & PLANNING 11/29/22



Speaker: Tim Anson, ACE President

Architect, Gresham Smith

**Activity:** Students had to design and draw their own house floor plan using schematic design, architectural scales, and construction documents.

# LANDSCAPE ARCHITECTURE / URBAN PLANNING 12/13/22



Speaker: Ryan Collins, ACE Board Member,

Principal at Dix-Hite

**Activity:** Student teams along with their mentors, were tasked with designing a Gingerbread park that correlated with the office building, school, gas station, and street intersections surrounding it.

## **INTRO TO ENGINEERING:**

#### CIVIL ENGINEERING 01/10/23



**Speaker:** Alex Kirkland with Schoel Engineering **Activity:** Students had to design and draw a parking lot using architectural scales and construction documents.

# MECHANICAL/ELECTRICAL/PLUMBING ENGINEERING 01/24/23



Speaker: Gideon Wamae, GW Engineering LLC

Activity: Building a 3-way switch

# STRUCTURAL ENGINEERING 02/07/23



Speaker: David Burkhalter and Jamieson

Matthews, MBA Engineering

**Activity:** Each student team had to build the tallest tower possible that will support the weight of a golf ball for 2 minutes using plastic straws,

pipe cleaners, and paper clips.

# INTRO TO CONSTRUCTION:

# INNOVATION TECHNOLOGIES 03/07/23



Speaker: Harrison Haigler and Val Lang,

Brasfield & Gorrie

Activity: Divided into two teams, each had to select two people to be project managers that were tasked with communicating the dimensions, shape, and even the thickness of the walls for the house plan. The remaining team or field crew had to build a model of the house. The catch?? Project managers were separated from the field crew and couldn't see the model their team built until the end.

# CONSTRUCTION SITE VISIT - BROOKWOOD MEDICAL 03/23/23



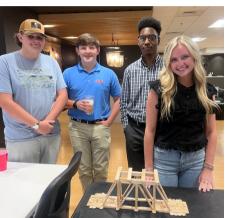
Speaker: Robins & Morton

**Activity:** Toured the Brookwood Baptist Medical Center's new \$30 million, 18,922-square-foot

operating room project.

# FINAL PROJECTS: BUILD A POPSICLE STICK BRIDGE

Students worked together in teams to design and build their own truss bridge using only popsicle sticks and glue. Each team was judged on the design, presentation, and drawings of the structure. However, the ultimate challenge for any bridge is the amount of weight it can withstand!

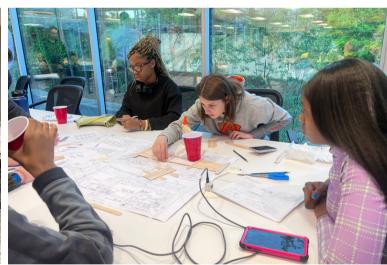


















### 2023 ACE SCHOLARSHIP BANQUET



We had an incredible time celebrating all ACE students and scholarship winners at the 2023 ACE Annual Scholarship Banquet. Due to the generous support of our sponsors we were able to award \$22,000 in scholarships.

It was an honor to have Eric Berg, Principal and Vice President of TURNERBATSON join us for the banquet as our keynote speaker.







#### **ANNUAL BANQUET SPONSORS:**













### 2022 - 2023 SCHOLARSHIPS

Since our start in 2004, the ACE Mentor Program of Alabama has invested thousands of mentoring hours and tens of thousands of dollars of scholarships toward the college education of ACE students. This year, we were able to award \$22,000 worth in scholarships to five incredible high school seniors to pursue career opportunities in the ACE industry!



WILL PHILLIPS

Hewitt Trussville

Auburn University
Building Construction
Science

Scholarship Award:

\$5.000





JAZMIN ARNOLD

Hewitt Trussville

University of Alabama Civil Engineering

Scholarship Award:

\$4,000



CODY MCDANIEL

Hewitt Trussville

Southern Union State Community College -Engineering

Scholarship Award:

\$2,000



IN SCHOLARSHIPS HAVE BEEN AWARDED SINCE THE PROGRAM'S INCEPTION IN 2007.



E.J. RHETTA JR.

Ramsay High School

Auburn University Engineering

Scholarship Award:

\$1.500

### 2022 - 2023 SCHOLARSHIPS

We were thrilled to receive the news that our affiliate was given the opportunity to award a scholarship funded by HCA Healthcare Capital Deployment & Their Partnering Firms.

HCA is one of the nation's leading providers of healthcare services with a strong history of charitable giving. Every year, this organization chooses a worthy cause to provide a generous donation toward.

This year, they selected the ACE Mentor Program to award several individual scholarships to deserving students. Our affiliate selected Hewitt Trussville graduate, Kalea Townes as the recipient of this scholarship in the amount of \$10,000.

During her time in the ACE Program, Kalea exuded kindness and excellent leadership skills. We are excited to see all of the phenomenal things Kalea will bring to the ACE industry as she starts her journey at Auburn University to pursue a career in Civil Engineering.



### KALEA TOWNES

**Hewitt Trussville** 

Auburn University Civil Engineering

HCA Healthcare
Foundation Scholarship

\$10,000

# THANK YOU!

We are truly blessed to have such a large and involved group of supporters, who enable us to provide a rich curriculum for our students. The ACE Mentor Program simply would not exist without the help these incredible organizations selflessly provide. Our sponsors are the cornerstone of our scholarship fundraising effort as well as day to day management of the program. We truly appreciate their continuous support!



2022 - 2023 SPONSORS

# **ROBINS & MORTON**















#### Tim Anson - Chairman

Architect
Gresham Smith
tim.anson@greshamsmith.com

#### Virnetta Woodbury - Vice President

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Contractor
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#### Ryan Collins - Past Chairman

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#### **Kevin Garrison**

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#### **Scott Wiseman**

Treasurer
Warren Averett
scott.wiseman@warrenaverett.com

### **HOW TO GET INVOLVED WITH ACE**

#### **Become an ACE Mentor:**

ACE Mentors meet with students on a bi-weekly basis from early September through May, working with students to guide them as they learn about each discipline and develop design solutions for a hypothetical project. Sessions are after work hours from 5:30 – 7:30PM, bi-weekly, on Tuesdays.

Visit www.acementor.org/get-involved/as-a-mentor/
to learn more information or register as an ACE Mentor.

#### **Get Students Engaged:**

Do you know a high school which would like to learn more about our program and participate or high school students who might be interested? Outreach to schools in the local community is essential to grow our program.

Visit www.acementor.org/get-involved/as-a-student/ for more information or register as an ACE student.

#### Donate to ACE of Alabama:

Every contribution is helpful in making ACE possible. All contributions directly benefit students who are dedicated to the program and are currently interested in pursuing careers within an ACE related field. ACE Mentor Program is a 501(c) 3, making all contributions tax-deductible.

If you are interested in supporting ACE or would like more information, please email us at acementoralabama@gmail.com

# FOLLOW THE OR CODE:



To learn more about how you can get involved with us!

#### FIND US ONLINE:

Stay up to date on the most current news and events!

ACE of ALBAMA: Website

ACE National: Website

#### **FOLLOW US ON SOCIAL MEDIA:**

@acementoralabama





Share your experience with us!

**OTHER QUESTIONS?** 

PLEASE EMAIL OUR EXECUTIVE DIRECTOR,
SAVANNAH LOWERY AT
ACEMENTORALABAMA@GMAIL.COM

### 2023-2024 PROGRAM YEAR

We are excited to announce that the 2023 - 2024 school year is going very well! We have seen a major increase in student enrollment since 2022 with over 85 students signed up from all across Birmingham.

#### 2023 - 2024 Curriculum

Introduction to Architecture **Architectural Drawing** Landscape Architecture & Urban Planning Civil Engineering • M/E/P Engineering Structural Engineering Introduction to Construction

**Estimating & Proposals** 

Cooper Green Client Site Visit

**BLOX Site Visit** 

**Public Speaking** 

#### **ACE BOARD OF DIRECTORS: 2023 - 2024 PROGRAM YEAR**

**Tim Anson - Chairman Gresham Smith** 

Ryan Collins - Past Chairman Dix-Hite

Savannah Lowery - Executive Director ACE Mentor Program of Alabama

Virnetta Woodbury Brasfield & Gorrie

**Daniel Witteck** Black Design Architecture

**Ashley Dryer** Robins & Morton

Suchithra Prabhu Williams Blackstock

Charles Williams Charles Williams & Associates

**Wesley Frost** DC BLOX

**Jamieson Matthews** MBA Engineers, INC.

**Kevin Garrison** Baker Donelson

**Scott Wiseman** Warren Averett

### **PROGRAM STATS:**

2023 - 2024

85 STUDENTS

**36 MENTORS** 

16 MEETINGS

**3 CONSTRUCTION SITE VISITS** 

#### **HIGH SCHOOLS** 2023 - 2024

A.H. Parker High School Gardendale High School Hewitt Trussville High School Jefferson County International **Baccalaureate School** Shades Vally High School Ramsay High School Alabama School of Fine Arts **Hueytown High School** Mountain Brook High School Northridge High School Corner High School

The Altamont School

Thompson High School

Holy Family Cristo Rev

John Carroll Catholic High School

Christopher Al **Dix-Hite Landscape Architects** 

**KMS** Adam Gerndt Design Group **BLOX Gray Construction Gresham Smith ArchitectureWorks Robins & Morton** Turnerbatson MBA Engineers, INC Alabama Power **MJ** Harris Construction

MENTOR FIRMS

2023 - 2024

Black Design Architecture

Brasfield & Gorrie







# **ACE MENTOR PROGRAM OF ALABAMA**

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