ACE EXPANDS ENGINEERING WORKFORCE

Engage Excite Enlighten
Motivates Students to Pursue Engineering Careers

96% Seniors Interested in Engineering

Report ACE strengthened their commitment to this career or persuaded them to pursue it

40% ACE High School Seniors

Enter college planning an engineering major related to construction industry.

Expands Diversity

30% Women

55% Minority

Recent ACE Alumni (2012-2016)

Majoring/working in construction-related engineering fields

Teaches Valuable Skills

% Students Strongly/Moderately Agreeing

ACE showed me the lack of diversity for women and minorities in engineering, but my involvement in the program also affirmed my abilities to transcend these barriers.

— 2015 ACE alumna, Carnegie Mellon University

Continues to Benefit

ACE Program Alumni

85% Alumni

Agree ACE gave them

− Edge over their college peers
− Professional network useful for career advancement

38% Recent Alumni (2012-2016)

Pursue college majors or hold professional positions in civil, structural, mechanical, electrical or architectural engineering.

Impacts Mentors

Professionally + Personally

29% of ACE mentors are

Structural Civil Environmental & Electrical Engineers

Mentor Benefits

% Mentors Agreeing

52% Knowledge about A-E-C industry outside my field expanded

55% Ability to explain technical concepts improved

72% Pleasure sharing my passion for the industry

75% Professional network extended

ACE Program Skills

Problem-solving ability strengthened 72%

Leadership competence grew 75%

Oral communication skills improved 76%

Teamwork ability increased 86%

Engineering Design Skills

65% Computer-aided design

70% Basic engineering principles

75% Mech., Elec., Plumb. Infrastructure

92% Knowledge of designing building or structure
ACE helped me develop people skills, leadership skills, and allowed me to gain hands-on experience in engineering fields.

– Student, Dallas, TX

ACE EXPANDS ENGINEERING WORKFORCE

BY ATTRACTING THE NEXT GENERATION OF CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL AND ARCHITECTURAL ENGINEERS, ACE PLAYS A CRUCIAL ROLE IN ADDRESSING THE DESIGN AND CONSTRUCTION INDUSTRY’S WORKFORCE NEEDS.

I’ve learned of the genuine interest of the younger generation in engineering and have been inspired to keep spreading the word that engineering is fruitful and worthwhile.

– Civil Engineer Mentor, New York City

THE ACE MENTOR PROGRAM

ACE’s 70 affiliates operate in 37 states, the District of Columbia, and Puerto Rico. Approximately 3,600 mentors annually engage 9,000 students from 1,000 schools in a free, 15-session afterschool program. Two-thirds of students are from minority and underserved populations. More than one-third are female. Since its start in 1994, ACE has awarded $15M+ in scholarships.

www.acementor.org

DATA SOURCES

This report’s data are drawn from three large-scale surveys (2017) of students, alumni (classes of 2012-16) and mentors. The surveys’ margins of error range from 1.5% to 2.2%. The statistic about national freshmen studying architecture is from Higher Education Research Institute, UCLA, 2016 CIRP Freshman Survey.