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 2.3%. The statistic about national freshmen studying architecture is from Higher Education Research Institute, UCLA 2016 CIRP Freshman Survey.
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

85% ALUMNI

Agree ACE gave them
- edge over their college peers
- professional network useful for career advancement

86% SENIORS
ENTER ABET-ACREDITED ENGINEERING PROGRAMS

40% ACE HIGH SCHOOL SENIORS
ENTER COLLEGE PLANNING AN ENGINEERING MAJOR RELATED TO CONSTRUCTION INDUSTRY.

86% SENIORS
ENTER ABET-ACREDITED ENGINEERING PROGRAMS

EXPANDS DIVERSITY

30% WOMEN

55% MINORITY

RECENT ACE ALUMNI (2002–2016)
MAJORING/WORKING IN CONSTRUCTION-RELATED ENGINEERING FIELDS

34% FEMALE

75% PROFESSIONAL ENGINEERS

IMPACTS MENTORS

29% OF ACE MENTORS ARE
STRUCTURAL, MECHANICAL, CIVIL, ENVIRONMENTAL & ELECTRICAL ENGINEERS

MENTOR BENEFITS

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

TEACHES VALUABLE SKILLS

% STUDENTS STRONGLY/MODERATELY AGREEING

ENGINEERING DESIGN SKILLS

65%
- computer-aided design

70%
- basic engineering principles

75%
- mech., elec., plum. infrastructure

92%
- knowledge of designing building or structure

WORKFORCE SKILLS

72%
- problem-solving ability strengthened

75%
- leadership competence grew

78%
- oral communication skills improved

86%
- teamwork ability increased