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 2.9%. 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
ACE PROGRAM ALUMNI
85% ALUMNI
> 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, MECHANICAL, 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

TEACHES VALUABLE SKILLS
% STUDENTS STRONGLY / MODERATELY AGREEING
ENGINEERING DESIGN SKILLS
COMPUTER-AIDED DESIGN 65%
BASIC ENGINEERING PRINCIPLES 70%
MECH., ELEC., PLUMB. INFRASTRUCTURE 75%
KNOWLEDGE OF DESIGNING BUILDING OR STRUCTURE 92%

WORKFORCE SKILLS
PROBLEM-SOLVING ABILITY STRENGTHENED 72%
LEADERSHIP COMPETENCE GREW 75%
ORAL COMMUNICATION SKILLS IMPROVED 78%
TEAMWORK ABILITY INCREASED 86%

EXPANDS DIVERSITY
30% WOMEN
55% MINORITY

RECENT ACE ALUMNI (2012-2016)
MAJORING/WORKING IN CONSTRUCTION-RELATED ENGINEERING FIELDS
19% NATIONALWIDE 37% ACE 2016
22% NATIONALWIDE 33% ACE 2017

COLLEGE FRESHMEN
PLANNING AN ENGINEERING MAJOR
30% 55%
AFRICAN-AMERICAN / HISPANIC WOMEN

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.