



## MATHEMATICS, ENGINEERING, SCIENCE ACHIEVEMENT (MESA)

One of the country's most successful programs of its kind, Mathematics, Engineering, Science Achievement (MESA) provides academic support for thousands of educationally disadvantaged students so they can excel in math and science and graduate with baccalaureate degrees in science, engineering, computer science, and other math-based fields.

MESA works closely with industry partners and the University of California, the California State University, the California Community Colleges, the Association of Independent Colleges and Universities, the California Department of Education, school districts, and individual schools. MESA is nationally recognized for its innovation in academic development. MESA was founded in 1970 and is administered by the University of California.

MESA provides rigorous academic development that includes math and science curriculum based on the California Math and Science Standards. MESA also offers individualized academic planning, study skills training, peer group learning techniques, career exploration, parent involvement, professional development, transfer assistance, and special orientation classes and services for students in community college and four-year institutions.

MESA serves students through three programs. The MESA Schools Program supports pre-college students throughout the state to excel in math and science and go on to higher education. The MESA Community College Program assists community college students academically so they can transfer to four-year institutions as majors in math-based fields. The MESA Engineering Program supports students at major California universities to attain degrees in engineering and computer science.

MESA enjoys strong support from companies because they recognize MESA's success in producing technical professionals needed by industry to stay competitive. Leaders such as AT&T, Bayer, General Electric, HP, IBM, Intel, PG&E, Southern California Gas Company and Verizon have provided funding, in-kind contributions, scholarships, and internships to assist MESA students. Corporate representatives serve on state and local MESA advisory boards.

MESA has been named as one of the most innovative public programs in the nation by Innovations in American Government, a project of the Kennedy School of Government at Harvard University, and the Ford Foundation. MESA also is a winner of the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring.

California MESA is the model for similar programs operating in over a dozen other states.



## BEATING THE ODDS: MESA PROGRAM OUTCOMES FOR 2008-09

- 70% of schools participating in MESA are among the most underperforming in the state. Of the remaining 30%, MESA is involved with the most educationally disadvantaged student sectors.
- 70% of MESA high school graduates go on to college directly after graduation, compared to 48% of California high school graduates.
- 59% of MESA high school seniors are eligible to attend UC, compared to 13% of California high school graduates.
- Of MESA high school graduates who went to college,
  - 30% went to UC
  - 23% went to CSU
  - 34% went to community college
  - 7% went to independent California universities or colleges
  - 7% went to other institutions, mostly out-of-state universities or colleges
- Of MESA high school graduates, 60% went on to postsecondary education as majors in science, technology, engineering or math (STEM) fields.
- The top university destinations of MESA high school graduates are 1) UC Berkeley and UC Davis (tie), 2) UCLA, 3) UC Santa Barbara, 4) UC San Diego, 5) UC Riverside and University of the Pacific (tie).
- Of the MESA community college students who transferred to four-year institutions, 49% transferred to CSU, 43% transferred to UC, and 8% transferred to independent California or out-of-state universities and colleges.
- Of those MESA community college students who transferred to four-year institutions, 100% entered as math or science majors.
- The top campus transfer destinations for MESA community college graduates are 1) UC Davis, 2) San Jose State University, 3) UC San Diego, 4) Cal Poly San Luis Obispo, 5) UC Berkeley.
- The top majors of MESA engineering program graduates are 1) civil engineering, 2) electrical engineering, 3) mechanical engineering, 4) computer science, 5) computer engineering.
- California MESA is the model for similar programs in over a dozen other states, including a national HP community college initiative designed to increase the number of African American, Latino American, American Indian, and female engineers and computer scientists.