

## MESA Engineering Program (MEP)

The MEP supports educationally disadvantaged students to attain four-year degrees in engineering or computer science. The MEP's rigorous academics, leadership preparation, and collaborative problem-solving training produce highly skilled graduates who meet industry's workforce needs. The MEP establishes a peer community for its students, most of whom are first in their family to go to college, based on mutual academic support and high standards, encouragement and motivation. Establishment of this strong academic peer community sets MEP apart from most other programs.

Given state budget cutbacks, MESA has been unable to completely fund the MEP. However, MESA continues to seek additional resources for this important program and is hopeful that state funding will be restored to the MEP in the future. Meanwhile, MEP centers receive the majority of funds from their host institutions and receive additional support from local industry partners. MESA provides partial funding and internship/scholarship opportunities.

Main components of the MEP include:

- Academic excellence workshops. Students are clustered in the same core math and science classes and taught how to deepen their understanding of complex key concepts and maintain high academic outcomes through group study techniques.
- Orientation course for freshmen and transfers. The class teaches special college achievement skills tailored to students pursuing these extremely difficult majors.
- **Career advising**. Students learn specifics about various engineering majors and job experiences. Industry mentors, job shadowing opportunities, career fairs, internships and field trips to companies are also offered.
- Links with student and professional organizations. Groups such as the American Indian Science and Engineering Society (AISES), the National Society of Black Engineers (NSBE), the Society of Hispanic Professional Engineers (SHPE) and the Society of Women Engineers (SWE) provide mentors, guest speakers, field trips and industry support.
- Professional development workshops. Students participate in mock job fairs, develop resume
  preparation and interview skills, and learn how to find part-time, full-time and summer employment.
- The student study center and computer lab. This dedicated multipurpose space is used for study, workshops and information sharing. It is a key element to building a close learning community.
- Industry Advisory Boards. These boards offer valuable connections between students and industry leaders. Corporate representatives, including MESA alumni, participate on boards and provide scholarships, strategic planning, special summer internships, field trips and other resources.