

SMU engineering seeks gender parity

The Southern Methodist University School of Engineering has announced a new initiative designed to make it the first engineering school in the country to have an equal enrollment of male and female students. The school plans to reach gender parity within five years by developing innovative programs that will interest a broad range of students.

"Medical and law schools have already reached gender parity, so why not engineering schools?" said Stephen Szygenda, dean of the SMU School of Engineering. Szygenda said that achieving gender parity in engineering schools is important because it will provide a much richer educational experience for engineering students and help the engineering profession by introducing a wider variety of ideas to create innovation and increase competitiveness.

20 percent women

Currently only 20 percent of undergraduate engineering students nationwide are women. Even fewer women pursue graduate degrees in engineering, which means that there are few women qualified to be faculty members at engineering schools. According to the Chronicle of Higher Education, only 15.5 percent of students receiving engineering doctoral degrees in 1999-2000 were women.

In comparison, 51 percent of students entering medical school in 2002 were women and 49 percent of students entering law school in 2002 were women.

Szygenda said SMU is the ideal location to become the first engi-

neering school in the nation with gender parity because it already has nearly 30 percent female students, one of the highest percentages of female enrollment in the country. The school also offers an innovative "Engineering and Beyond" curriculum and is home to The Institute for Engineering Education at SMU, which was created in 2001 to facilitate collaboration among universities, K-12 educational organizations and corporate entities to address the issues related to the shortfall in engineering and technical talent expected in the coming years.

New initiative

The new initiative at SMU goes far beyond what other engineering schools in the country are doing. Texas A&M University has set a goal of reaching 30 percent women in engineering by 2003, and Arizona State University has a goal of reaching 25 percent women in engineering in five years.

More than 40 students, faculty members and community leaders attended a kick-off meeting for SMU's new initiative in September. Participants learned about components of the new initiative, which include working with students in grades K-12 to generate interest in engineering and technology, developing marketing strategies to attract women to engineering school, offering curriculum enhancements that appeal to women, and providing support systems and professional development opportunities for women.

The new initiative is being led by Betsy Willis, director of stu-

dent programs and outreach for the SMU School of Engineering. Willis holds a Ph.D. in engineering from Purdue University, with a major in food process engineering. While at Purdue, she worked on outreach, recruitment, mentoring, research and evaluation initiatives to further women in engineering through the university's Women in Engineering Program (WIEP), the first such program in the country.

Adding majors

Willis said the SMU School of Engineering plans to further enhance its curriculum by adding new majors such as a degree in engineering and the arts, offering service learning courses that allow students to apply engineering skills earlier in their academic careers and encouraging engineering students to participate in alternative spring break projects in which they could use engineering skills to help society.

"Women are very interested in the helping component of engineering," Willis said. "Curriculum enhancements such as service learning courses and alternative spring break will let students see how their engineering skills can impact people's lives."

Track success

Willis plans to carefully track the success of the initiative and help pinpoint new areas for development. Once the gender parity program is established at SMU, the school plans to share it with other universities as quickly as possible.