

## **College of Engineering – Minority Engineering Recruitment and Retention Program**

**Preparing for Majoring in Engineering (Prep-ME)** is a six-week summer program designed to introduce newly admitted underrepresented freshmen in the College of Engineering to college-level math, engineering as a discipline and profession, and the college environment.

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**Strategies** During Prep-ME math sessions, students learn how to use a graphing calculator to solve various algebra and trigonometry problems in preparation for college calculus. This program is funded by the State of Illinois, the University, and industry contributions, and is free for all incoming freshmen students from underrepresented groups in the engineering profession. The pre-college summer program is similar to what students experience during the school year. Students commute from home and participate in daily academic and social events on campus. The program has been enhanced over the past five years with grant money from the state totaling approximately \$250,000. Prep-ME students now receive six credits for participating.

**Outcomes** Prep-ME has proven to be a successful tool for recruiting academically prepared minority students at UIC, allowing these students to set clear academic goals during their college career. To illustrate the impact Prep-ME has on incoming freshmen and their experience at UIC with a difficult course, we compared difference between MERRP students who took Prep-ME and those who did not. Prep-ME students averaged 1.2 grade points higher in their math grades, 1.65 higher in their chemistry grades, and 1.0 higher in overall GPA. The average GPA of Prep-ME participants in Fall 2001 was 4.4 out of 5.0. The strength of the Prep-ME program is that it enhances the freshman's overall college performance. Prep-ME students gain first-hand exposure to the campus prior to the start of the semester. They receive quality instruction in mathematics and one liberal arts and science course. Additionally, they participate in campus seminars.

**Changes Planned** No changes are planned at this time.

# Minority Engineering Recruitment and Retention Program (MERRP)

**Goals/Objectives** The stated mission of the Minority Engineering Recruitment and Retention Program (MERRP) is to promote academic excellence among African American, Latino, and Native American engineering students at UIC. The philosophical foundation of this program emphasizes student sufficiency, community building and an environment of success.

**Strategies** MERRP has developed a comprehensive program designed to increase the enrollment and graduation of historically underrepresented ethnic minority students. MERRP's approach is multifaceted and emphasizes service and an environment of success that includes academic advising, problem solving, group study, academic assistance, scholarship support, career development, mentor programs, a summer transition program, and pre-college high school instruction. MERRP has a staff of four full-time, 2 part-time and 31 student workers. The four full-time staff devote approximately 25% of their time to recruitment efforts.

***Black Issues in Higher Education (6/20/2002) ranks UIC 37<sup>th</sup> in the nation in the number of bachelor's degrees in engineering awarded to Blacks and 22<sup>nd</sup> in the number awarded to Latinos.***

MERRP recruits academically talented students from the Chicago area through coordinated high school visits and annual College of Engineering events. The most important recruitment initiatives are the MERRP pre-college programs and a transition programs described in the section on Pre-College and Transition Programs. In addition, an essential piece of the MERRP program is financial support. The President's Award Program, and other state and campus funds allocated to this program, have allowed the program staff to leverage critical external scholarship funds from major corporations such as BP-Amoco, ComEd, FermiLab, Fluor Foundation, Honeywell, MIDCON, Motorola, Nicor Gas, Northrop and Raytheon. This support is an important recruitment tool as well as a major retention tool.

**Outcomes** The numbers of new freshman from underrepresented group in Engineering has varied over the past five years from 81 in 1997 to 42 in 1999. The Fall 2001 figure of 43 new Engineering freshman from underrepresented groups was lower than in 2000, but slightly higher than in 1999. One year retention rates of Latino engineering students have been higher than retention rates of Caucasians in all but one of the last 6 years. Retention of African American engineering students is not as high but the numbers are smaller and the rates more variable (Table 9 ).

**Changes Planned** Although the number of underrepresented new freshmen in Engineering in 2001 was less than expected, the number was not worrisome due to the overall downturn in new freshmen. That information, combined with the success of students participating in MERRP pre-college and transitional programs, does not suggest changes at this time. If lower enrollments become a trend, new initiatives will be considered.