

# SPOTLIGHT ON OU

## The Retention and Graduation Rates of 1992-98 Entering Science, Mathematics, Engineering and Technology Majors at Oakland University

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119 colleges and universities participated in the Science, Mathematics, Engineering and Technology (SMET) majors' retention survey in 2000: retention, graduation, and continuation rates were calculated over 6 years. Major findings of this survey reported:

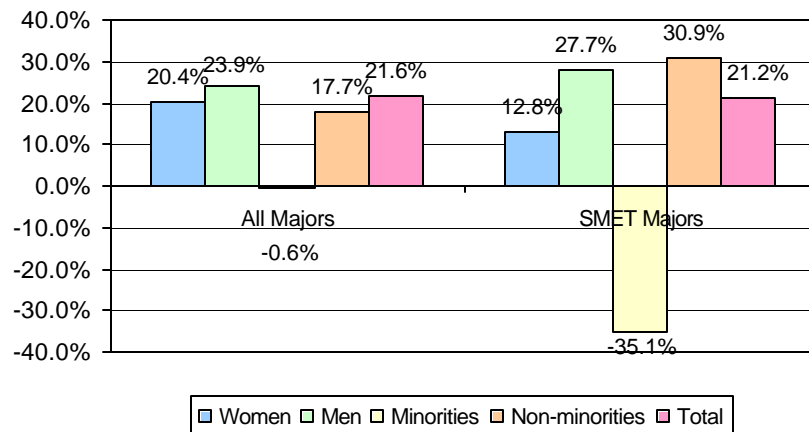
- “Proportionately more students chose SMET as a major in their freshman year; 26% of first-year students in 1998 compared to 24% in 1992.”
- “Almost half of the freshman SMET majors left the SMET disciplines before reaching their junior year.”
- “Approximately one in three graduates began their baccalaureate program as a SMET major but completed a degree from a non-SMET discipline.”
- “Women and minorities (Blacks, Hispanics, and American Indians) were underrepresented in the SMET disciplines and dropped out of the SMET programs at a higher rate.”

This paper compares Oakland University (OU) students in the SMET majors to the national norms.

1. According to the survey report, from 1992 to 1998, **“proportionately more students chose SMET as a major in their freshman year.”**

At OU, overall enrollment in the SMET majors increased slightly less than enrollment in the

**% Increases in First-time Freshman Enrollment 1992 to 1998  
Oakland University**



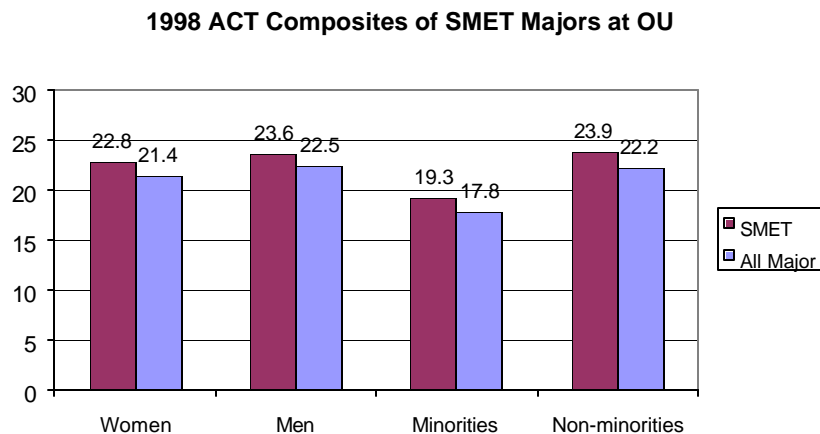
university's other majors (21.2% compared to 21.6%). However, the picture changes when the focus shifts to specific sub groups of students. The enrollments of non-minorities and men in the SMET majors increased significantly, while underrepresented minorities showed a 35.1% decrease enrollment in the SMET majors over 6 years. Women increased by less than 13%, compared to a 28% increase by men.

2. **“Women and minorities were underrepresented in the SMET disciplines”** was reported in survey summary report. Women are also underrepresented at OU: 66% of total 1998 first-time freshmen (FTIAC) but only 41% of the SMET majors were female. However, minorities may not be underrepresented in 1998, as they were 11% of all majors and 11% of the SMET majors.



3. The national norm shows, **“Compared with the general student population, SMET majors had higher admission test scores.”**

This is also true for OU, although OU SMET majors averages tend to be about 2 points lower than the national SMET majors average.

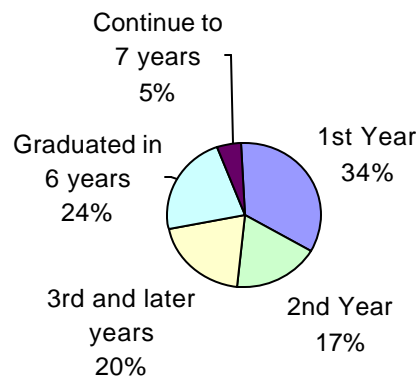


**4. “Almost half of the freshman SMET majors left the SMET disciplines before reaching their junior year.”**

Looking at the 1992 OU cohort, a little more than half (51%) of the SMET majors left the SMET disciplines before the start of their 3<sup>rd</sup> year. Over a period of six years, about 70% of the SMET majors either dropped out of college or transferred to a non-SMET discipline for their degrees. This number is 10% higher than national figure.

The numbers are more even dramatic for minorities. Of the 1992 cohort, none of the minority students in the SMET majors had graduated in 6 years and 92% of them dropped out or transferred to a non-SMET discipline.

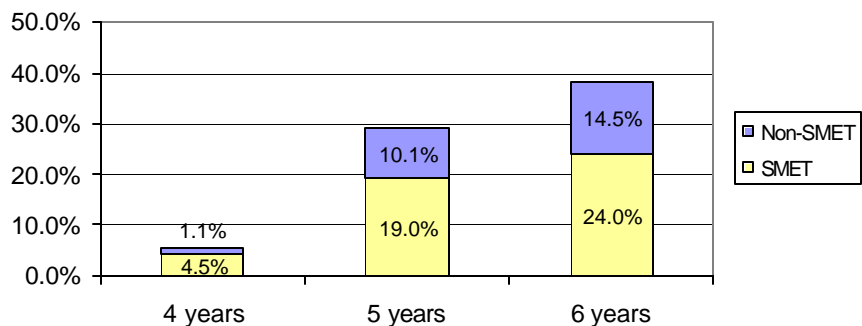
**Transfer and Drop-out Rates of SMET majors  
1992 cohort**



**5. According to the survey report, “Approximately one in three graduates began their baccalaureate program as a SMET major but completed a degree from a non-SMET discipline.”**

In the 1992 cohort at OU, 38.5% of FTIAC students entering SMET majors graduated in 6 years: 24% graduated from SMET discipline and

**Graduation Rates of SMET Majors  
1992 Cohort**



14.5% graduated from non-SMET majors. The percent of initial SMET majors who graduated in other disciplines is greater than the national norm (38% vs. 33%).

6. According to the survey report, **“The institution-wide graduation rates were consistently higher for women than men. However, a lower percentage of the women graduated from the SMET fields due to high transfer rates to non-SMET programs.”** This national trend is reflected at OU: the 6-year graduation rates for all FTIACs were 42% for women and 40% for men in 1992 cohort (typical of other years). However, the women’s graduation rate (22%) in the SMET majors is 4% lower than men’s graduation rate.