Program Overview

UC Merced Science and Math Initiative (SMI) is part of a UC-wide effort established under the California governor's initiative to address the severe shortage of science and mathematics teachers in California's secondary schools. The program includes coursework, academic and career counseling that allows students majoring in science, mathematics, engineering and cognitive sciences to explore and prepare for careers in teaching sciences and mathematics in secondary schools. SMI offers students opportunities to explore their interest in science and mathematics education as well as improve their own understanding and ability to communicate scientific and mathematical concepts.

SMI provides several pathways for students' participation in the program based on their level of interest and commitment to becoming teachers. The pathways students may choose to pursue are reflected in the composition of the program described below:

1) *Coursework*
SMI offers lower division courses that introduce students to effective teaching methodologies and learning strategies, fundamentals of pedagogy and classroom management and give an overview of California's public educational system as a whole. In addition, the fieldwork courses provide students with an opportunity to gain practical fieldwork experience in a K-12 classroom working as a paid intern under a guidance of a mentor teacher.

2) *Natural Sciences Education (NSED) Minor*
By completing the 24-unit program consisting of SMI and several general education courses a student can earn an NSED minor upon graduation. The minor is designed to prepare students majoring in sciences or mathematics for direct admission into teaching credential programs.

3) *Academic and Career Counseling*
SMI staff includes advisors and counselors that provide assistance to students with mapping out their academic program and career advice. The program works closely with advisors and faculty in both the student's Bachelor's degree and teaching credential programs to help students develop an optimal coursework schedule. In addition, SMI staff is able to obtain additional support and information about jobs, internships and other career enhancing opportunities through its extensive network of partners such as local school districts, other UC Campus, and other institutes of higher education.

5) *Networking and Career Enhancement Opportunities*
Participation in the program allows students to draw upon SMI's network of teachers, school administrators, researchers, education experts and policy makers in academic institutions, government agencies and non-profit organizations. SMI is working with many schools that are very interested in hiring qualified teachers and are looking at SMI interns as potential hires. In addition, a number of events such as professional development workshops for pre- and in-service teachers, seminars, roundtable

discussions are organized by the program and students' participation is highly encouraged.