

RESPONDING TO EXPECTATIONS OF NON-ENGINEERING STUDENTS

Ahmad R. Sarfaraz and Tarek A. Shraibati
California State University, Northridge

It is widely accepted that increasing the technical literacy among all students is critical as our society becomes increasingly dependent upon science and technology. Therefore, a number of engineering departments at some universities have begun to offer courses specifically addressing the needs of the non-engineering students. A general education course, Introduction to Computer-Aided Graphics Tools, has been offering by Manufacturing Systems Engineering and Management department (MSEM) at California State University, Northridge (CSUN) since Fall 1998. This course was designed to enable computer illiterate students to achieve success in the use of a CAD software package. The students enrolled in this class who form the general population of the CSUN campus usually come from a range of academic majors including: art, business, history, music, philosophy, social work, and theatre. In this paper, we intend to address the conceptions and expectations of non-engineering students who enrolled in this class. Students were surveyed to specify what types of technical literacy they would like to learn regarding science and engineering. The surveys intended to analyze their experience in the course, their perceived technical literacy, their educational preparation in math and science, their comfort in communicating with engineers, their satisfaction with the course, applicability of the course material to their major field of study, their comfort level taking an “engineering” course, and why they took the course in the first place. While the input from the non-engineering students forms a useful basis for curriculum development, the results of the study can be used for other engineering educators to develop specific details of instructional programs.