

UC SANTA BARBARA

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UC Santa Barbara Establishes New Ph.D. Emphasis in Technology and Society

Ph.D. students at the University of California, Santa Barbara can now enroll in an innovative new program of study dealing with the societal implications of technology.

The "Ph.D. Emphasis in Technology and Society" brings together doctoral students in engineering, the social sciences, and the humanities for multidisciplinary coursework and research on the cultural and societal changes resulting from new information technologies. A "Ph.D. Emphasis" is like an undergraduate minor, but available only to students pursuing a doctorate. UC Santa Barbara now has a total of eight such multidisciplinary Ph.D. emphases in specializations that include cognitive science, human development, and global studies.

The new program is the first of its kind in the University of California system to focus on the broader social implications of technology.

Interest in the topic is growing among students from academic majors across the curriculum. Undergraduates now take courses on technology and organizational change, on the effects of new technology on journalism, and even on writing fiction using a hyperlinked structure. Although universities have moved rapidly over the past decade in response to the ferment associated with technology, at the highest

level of academic training, the Ph.D., the pace of change has been slower. While steadily increasing numbers of young scholars working on doctorates in traditional academic fields such as communication, political science, and computer science are interested in technology-and-society issues, few universities have yet to accommodate their interests in a structured way. The multidisciplinary "technology-and-society" graduate programs that do exist generally require students to earn interdisciplinary degrees that stand apart from the traditional disciplines in which most scholars will pursue jobs after graduation.

The new program at UC Santa Barbara requires students to develop a working familiarity with contrasting approaches to the study of both technology and society, including two from disciplines outside their own. They do this by participating in a structured sequence of interdisciplinary courses focused on two general thematic areas: culture and history, and society and behavior. Completion of the requirements for the Ph.D. emphasis will be reflected on academic transcripts.

"The creation of the Ph.D. Emphasis in Technology and Society represents an innovative addition to UCSB's efforts to promote interdisciplinary research and collaborations across traditional academic boundaries," says Chancellor Henry T. Yang.

"Participation in this emphasis will give our Ph.D. students invaluable experience in conducting multidisciplinary research into the dynamic processes by which technology transforms societies."

He notes that UC Santa Barbara is well suited to host such a program, since the campus is home to the Center for Information Technology and Society, which developed and will coordinate the new Ph.D. Emphasis in Technology and Society, and also now boasts the brand new Center for Nanotechnology in Society, supported by a \$5-million grant from the National Science Foundation.

Efforts to develop the new Ph.D. Emphasis in Technology and Society were led by Bruce Bimber, a professor of political science and of communication, and Kevin Almeroth, a professor of computer science, who serve as director and associate director, respectively, of the Center for Information Technology and Society. "If we consistently produce Ph.D.s who can think about the difficult problems raised by technology from more than one angle, then we will have succeeded," says Bimber. "Our goal is to help create a new generation of what might be termed 'Renaissance

faculty,' scholars who can work comfortably with colleagues in other fields and on issues that cross disciplinary boundaries. One of the unusual aspects of UCSB's approach is the involvement of scholars from seven academic departments."

Bimber estimates that as many as 40 UCSB faculty members from across the social sciences, humanities, and engineering currently are involved in research on various aspects of the technology-society interface.

According to Almeroth, the new Ph.D. emphasis provides students in engineering and computer science with a rare opportunity to view their work from a broader perspective.

"Because so much of their curriculum focuses on developing technical competence, these students tend to judge the significance of their work primarily in terms of technological form and function," he says. "Taking courses in the humanities and social sciences alongside students in those fields will open their eyes to the larger social and cultural contexts in which their work takes place. It also will develop all students' appreciation for the challenges inherent in designing and implementing new technologies."

Kimberly Stolfus, who is pursuing a doctorate in communication with a technology-and-society emphasis, is interested in e-government and how new technology affects the mission of agencies responsible for foreign affairs. She notes that technology is changing who can communicate with whom, as well as who has access to what information, both of which have major implications for how government agencies like the U.S. State Department and the Agency for International Development function. "The multidisciplinary courses I am taking in pursuit of the technology-and-society emphasis are adding significantly to the theoretical and historical framework of my research," she says.

Participation in the Ph.D. Emphasis in Technology and Society is open to doctoral students in good standing from UCSB's Departments of Anthropology, Communication, Computer Science, English, History, Political Science, and Sociology.

Course offerings will be taught by UCSB faculty members from these and other departments as well as the graduate Media Arts and Technology Program.

Complete details about the new program and information on UCSB's Center for Information Technology and Society can be found on the Web at

<http://www.technology-society.ucsb.edu/>

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[New Ph.D. Emphasis](#)

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About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.