College of Engineering

Administration
Dean: David T. Hayhurst
Associate Dean: Randall M. German
Assistant Dean for Student Affairs: Lawrence C. Hinkle
Director of Doctoral Programs: Eugene A. Olevsky

Research Centers and Institutes

Communications Systems and Signal Processing Institute
Madhu S. Gupta, Director
This institute is engaged in educational, research, and service activities in the field of electronic communication systems, with an emphasis on radio frequency and digital signal processing aspects. Faculty, students, and industrial partners collaborate to advance the state-of-the-art in the institute’s core areas of expertise, such as RF devices and integrated circuits, modern, receivers, transmitters, synthesizers, A-D and D-A converters, digital signal processing algorithms and hardware, antenna, and communication networks. Specific activities include research and design projects; development of products, software, algorithms, and techniques; and training programs including short courses.

Concrete Research Institute
M. Ziad Bayasi, Director
The Concrete Research Institute supports educational needs in civil engineering curriculum and concrete research performed for sponsors from industry and governments. The institute encompasses a wide range of topics. The main emphasis is currently on concrete materials and structures. Civil and environmental engineering faculty members are involved with finding optimum design solutions in bridges, seismic resistant structures, residential buildings, and retaining walls.
Learn more by visiting the Web site at http://engineering.sdsu.edu/~sfrc/.

Energy Engineering Institute
Asfaw Beyene, Director
The Energy Engineering Institute has supported educational and research activities in energy related areas since 1985. Undergraduate and graduate students and faculty from the mechanical engineering and electrical and computer engineering departments are involved in obtaining solutions to problems presented by industrial sponsors. Institute research projects cover a wide range of areas from optimizing energy resources to international energy studies. For more information, visit http://engineering.sdsu.edu/energy.html.

QUALCOMM Institute for Innovation and Educational Success
David T. Hayhurst and Ric A. Hovda, Co-Directors
The QUALCOMM Institute for Innovation and Educational Success is a partnership between QUALCOMM/SDSU. This partnership was formed to accomplish the following objectives:
• Significantly increase the technology skills of SDSU graduates, thereby generating a more qualified workforce and a better-informed citizenry.
• Develop an educational system that values, encourages, and rewards creative methods of delivering education, from kindergarten through college graduation.
• Establish the institutional infrastructure at SDSU to support large-scale change and transformation of the education system through innovation, evaluation, and dissemination of effective educational methods.
• Dramatically shift the way education is delivered, from kindergarten through college, with an emphasis on improving technology skills and knowledge.
• Develop cross-curriculum synergies among SDSU academic programs that help teach technology skills to students in all courses of study.
• Develop an effective, sleeves-rolled-up dialogue among QUALCOMM, SDSU, and the greater San Diego business and corporate community, with the goal of addressing challenges, identifying opportunities, and generating responsive action.

The institute has the following four components:
• Improving Student Achievement in Mathematics Program to increase student mathematics performance in public schools.
• Project Lead the Way to increase the number and diversity of qualified students entering the College of Engineering.
• People, Information, Communication, and Technology Program to increase the integration of technology with undergraduate students.
• National Center for Urban Schools Transformation will assist urban public schools to dramatically improve the level of student achievement.