SAN DIEGO STATE UNIVERSITY

College of Engineering
Associate Dean for Undergraduate Studies
CANDIDATE SEMINAR

Opportunities for Undergraduate Education in the College of Engineering at San Diego State

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Abstract:
The College of Engineering at San Diego State is a recognized leader in undergraduate education within the California State University system and the nation. Combined with the research accomplishments of the faculty, the college is in a strong position to continue its leadership among undergraduate engineering programs. While specific opportunities for growth and development need to be aligned with the college's strategic plan, faculty interests, and staff resources, there are several areas that might build on the already successful programs. First, blended BS/MS programs have proven their utility to increase graduate enrollment at other universities, and may be a consideration for the college. This would provide a pipeline of SDSU students into the graduate level, which will benefit the students' professional ambitions, support faculty research, and encourage enrollment toward doctoral programs. Second, online education is significantly growing in relevancy and presents an opportunity to increase student success with its many different modes and strategies to deliver instruction. For example, several civil engineering faculty at Sacramento State have embraced the flipped classroom approach, along with hybrid synchronous teaching, leading to opportunities where students have continual access to lectures through recordable conferencing software. Finally, efforts should continue toward increasing the ability for students to successfully complete degree programs with an emphasis on reduced time to degree and closing achievement gaps. Maintaining academic rigor is a paramount priority, as is providing resources for students to persist in their programs, receive academic support when they begin to struggle, and understand program requirements through strategic academic advising. Several examples that have been implemented in the College of Engineering and Computer Science and Department of Civil Engineering at Sacramento State will be highlighted.

Speaker Bio:
Dr. Benjamin Fell is professor and department chair of civil engineering at California State University, Sacramento. He joined Sacramento State in 2008 after earning his Ph.D. at the University of California, Davis. Prior to that, he earned his M.S. at Stanford University and B.S. at Rensselaer Polytechnic Institute in Troy, New York. All his degrees are in civil and environmental engineering, and the graduate degrees focused on structural engineering, earthquake engineering, mechanics and structural dynamics. Since becoming department chair in 2005, Dr. Fell has led the department through a period of significant growth, with a 26% enrollment increase at the undergraduate level, and an increase in tenure-track faculty of 43%. Student success strategies in the Department of Civil Engineering, including curriculum redesign, course offering changes, and advising program improvements, have led to a fourfold increase in the 4-year graduation rate (3.6% to 16.0% over four years). Another focus of the department during Dr. Fell's tenure as chair has been a strong external fundraising effort resulting in $1.6M in total gifts to support lab development, infrastructure improvements, endowment growth, and curriculum offerings. As a faculty member, Dr. Fell was part of two National Science Foundation grants focusing on earthquake engineering, along with several grants to support integration of engineering topics into K-12 classrooms, all totaling $6.55M. His research has been published in several of the top journals and conference proceedings in his field, and was recognized in 2013 with the Sacramento State President's Award for Research and Creative Activity and in 2012 with the Outstanding Scholarly & Creativity Award in the College of Engineering and Computer Science.