



THE CHINESE UNIVERSITY OF HONG KONG
 In Celebration of the 20th Anniversary of
 Faculty of Engineering
**Co-organized with the Education Chapter of
 IEEE Hong Kong Section**
Seminar



On Reform of Engineering Education

by

Professor Michael Lightner (2006 IEEE President)
Professor and Chair
Department of Electrical, Computer and Energy Engineering
University of Colorado at Boulder

Date : 1 June, 2011 (Wed.)
Time : 6:30pm - 8:00pm
Venue : LT6, 2/F, Cheng Yu Tung Building (the new teaching building next to University MTR Station and Hyatt Regency Hong Kong, Shatin)
The Chinese University of Hong Kong

Abstract

Engineering education is facing a perfect storm of challenges: geographic shifts in the profession demand a global view in education, the interdisciplinary nature of most real projects demand education expand beyond traditional silos, the nature of the engineering workplace has changed radically and needs to be reflected in education shifts, and the hardware, software and computational resources available in the workplace should radically impact the focus of engineering pedagogy. Combine these pressures and the impact of the ubiquitous availability of engineering and design information and we foresee dramatic changes in engineering education. However, changing curriculum, teaching techniques, laboratories and degree requirements is traditionally very difficult. In this talk we present the challenges facing current engineering education, some changes being made at specific institutions and explore scenarios for future engineering education. While the challenges mentioned cross all engineering disciplines most examples will be from electrical and computer related areas.

Biography

Professor Michael Lightner received B.S. and M.S. degrees from the University of Florida and a Ph.D. from Carnegie Mellon University, all in electrical engineering. He is a Professor of Electrical and Computer Engineering at the University of Colorado-Boulder, where he has taught since 1981. His technical interests focus on developing and applying technologies to enhance learning. He has held positions at AT&T Bell Labs and IBM Watson Research. He has over eighty publications. Lightner is also a professional musician and has performed at Carnegie Hall. Lightner served as IEEE president in 2006.

**** ALL ARE WELCOME ****