

Engineering Education in the 21st Century

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This is a time of unprecedented change as powerful forces are reshaping the world around us. Higher education is confronted with breathtaking new challenges and opportunities. In particular, engineering programs are among the most affected ones in this rapid transformation. In the new century, academic competition will be increasingly fierce, and the most successful engineering education programs will be those that re-examine their educational mission and are not afraid to reform their programs. This lecture discusses and re-examines the role of engineering in a modern university, the programmatic balance between specialized engineering education and broad liberal arts learning, the interaction between undergraduate and graduate programs, the relationship between academia and industry, and the impact of globalization and instructional technology on engineering teaching.