

Board Meeting  
July 23, 2009

ESTABLISH THE MASTER OF SCIENCE IN FINANCIAL ENGINEERING,  
COLLEGES OF BUSINESS AND ENGINEERING AND THE GRADUATE  
COLLEGE, URBANA

**Action:** Approve the Establishment of the Master of Science in Financial Engineering, Colleges of Business and Engineering and the Graduate College, Urbana

**Funding:** No New Funding Required

The Chancellor at Urbana with the advice of the Urbana-Champaign Senate recommends approval of a proposal from the Colleges of Business and Engineering and the Graduate College to establish a Master of Science in Financial Engineering.

Financial Engineering is a relatively young, multidisciplinary field that pertains to the application of engineering approaches and methods to the analysis and management of financial problems, particularly in the financial asset arena. Common problems involve identifying and managing financial risk in asset portfolios and the pricing of financial derivatives. Other applications exist in proprietary security trading operations as well as all domains where risk is an important concern. The field has emerged as the result of the ever growing complexity required in describing and solving these advanced business problems whose resolution requires fundamental economic principles and finance theory from the fields of business coupled with state-of-the-art

mathematical methods, computational tools, and computer programming expertise used in the engineering disciplines.

The M.S. in Financial Engineering is designed to satisfy the growing demand for professionals with significant technical/quantitative training in the dramatically expanding sub-area of finance related to advanced financial instruments. The curriculum will be drawn from four core areas of study: finance, stochastic modeling, computing and computational methods, and an applied practicum experience. The degree, while technical in nature, is intended to have practical application in order to prepare students to be well-grounded and well-equipped to advance quickly in this field. The degree is proposed as a self-supporting program.

The Board action recommended in this item complies in all material respects with applicable State and federal laws, University of Illinois *Statutes*, *The General Rules Concerning University Organization and Procedure*, and Board of Trustees policies and directives.

The Vice President for Academic Affairs concurs with this recommendation. The University Senates Conference has indicated that no further Senate jurisdiction is involved.

The President of the University recommends approval. This action is subject to further review and approval by the Illinois Board of Higher Education.