EFIN - Financial Engineering

EFIN 101. Introduction to Financial Engineering. 1 Credit. (1 Lec) S
A seminar course surveying the financial engineering profession. Topics include an overview of career opportunities, problem solving processes, and an introduction to the basic financial engineering processes, professionalism, and ethics.

EFIN 301. Engineering & Economic Financial Management I. 3 Credits. (3 Lec) S
PREREQUISITE: ECNS 301, EIND 354 COREQUISITE: EFIN 101 Introduction to financial engineering principles and tools used to manage risk, lower costs, and access new markets. Applications of arbitrage pricing are explored with emphasis on derivatives and applications. Numerous numerical financial applications using R and higher-level programming languages.

EFIN 401. Engineering & Economic Financial Management II. 3 Credits. (3 Lec) F
PREREQUISITE: EFIN 301 This is the second course in the financial engineering course sequence. Financial engineering develops and manages financial strategies and tools in financial management. Topics include optimization, depreciation, risk management, asset value models, stress testing, credit derivatives, and regulation.

EFIN 499R. Financial Engineering Design Capstone. 3 Credits. (1 Lec, 1 Ind, 1 Rct) S
PREREQUISITE: EFIN 401 A comprehensive open-ended team design project emphasizing the engineering and evaluation of financial instruments and decision support models in order to manage risk, create strategic business opportunities, lower costs and access new markets. Teamwork and communication skills emphasized. Co-Convened with EIND 499R. Dept of Mechanical & Industrial Engineering.