Industrial Engineering

**IE 420  Financial Engineering**  credit: 3 OR 4 hours.
Introduction to the theory and practice of financial engineering: basics of derivative securities and risk management; Markowitz portfolio theory and capital asset pricing model; interest rate and bonds; forward and futures contracts, hedging using futures contracts; option contracts and arbitrage relationship; binomial model, no-arbitrage pricing, risk-neutral pricing, and American options pricing; Brownian motion, Black-Scholes-Merton model, delta hedging, Greek letters, implied volatility, and volatility smile. 3 undergraduate hours. 4 graduate hours. Prerequisite: IE 300.

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<td>11:00 AM - 12:20 PM</td>
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<td>Feng, L</td>
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Credit Hours: 4 hours
Restricted to students in the Industrial&Enterprise Sys Eng department.
Restricted to Graduate - Urbana-Champaign.

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Credit Hours: 3 hours
Restricted to General Engineering or Industrial Engineering or Systems Engineering and Design major(s). Restricted to Undergrad - Urbana-Champaign.