

# IEOR JUNIOR/SENIOR ADVISING SESSION

THURSDAY, NOVEMBER 5, 2009

Presented By

Ms. Adina Brooks, Student Affairs Manager



Department of Industrial Engineering and Operations Research



# The IEOR People

*Currently:*

- ◆ Undergraduates: 290
- ◆ M.S. Students: 331
- ◆ Ph.D. Students: 49
- ◆ Full-time Faculty: 19
- ◆ Adjunct Faculty: 35
- ◆ Affiliated Faculty: 13 (Business, Electrical, Statistics, Mathematics)

# Operations Research: Junior Year Required Courses

- ◆ MATH E1210: Ordinary Differential Equations
- ◆ IEOR E3608: Math Programming (or E4004)
- ◆ IEOR E3106: Stochastic Models (or E4106)
- ◆ COMS W4111: Database Systems

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- ◆ IEOR E3402: Production Planning
- ◆ IEOR E4404: Simulation
- ◆ IEOR E4600: Applied Integer Programming
- ◆ Plus technical electives

# Operations Research: Senior Year Required Courses

- ◆ IEOR E4003: Industrial Econ.  
(or E4403)
- ◆ IEOR E4307: Forecasting
- ◆ IEOR E4407: Game Theory

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- ◆ IEOR E4405: Production Scheduling
- ◆ Plus technical electives (need 12 pts total, 6 from IEOR)

# OR: Engineering Management Systems

## Junior Year Required Courses

- ◆ MATH E1210: Ordinary Differential Equations
- ◆ IEOR E3608: Math Programming (or E4004)
- ◆ IEOR E3106: Stochastic Models (or E4106)
- ◆ ECON W3211: Microeconomics

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- ◆ IEOR E3402: Production Planning
- ◆ ECON W3213: Macroeconomics
- ◆ COMS W4111: Database Systems
- ◆ Plus technical and management electives

# OR: Engineering Management Systems

## Senior Year Required Courses

- ◆ IEOR E4003: Industrial Econ. (or E4403)
- ◆ IEOR E4404: Simulation

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- ◆ IEOR E4998: Managing Tech. Innovation **or**  
IEOR E4550: Entrepreneurship Bus. Creation
- ◆ IEOR E4001: Design And Mgmt. of Prod. & Service Systems
- ◆ Plus technical electives (need 12 pts total, 6 pts from IEOR) and management electives (9 pts total)

# OR: Financial Engineering

## Junior Year Required Courses

- ◆ IEOR E3608: Math Programming (or E4004)
- ◆ IEOR E3106: Stochastic Models (or E4106)
- ◆ IEOR E4003: Industrial Economics (or E4403)
- ◆ ECON W3213: Macroeconomics
- ◆ IEOR E3402: Production Planning
- ◆ IEOR E4404: Simulation
- ◆ IEOR E4700: Intro to Financial Engineering
- ◆ ECON W3211: Microeconomics
- ◆ COMS W4111: Database Systems

# OR: Financial Engineering

## Senior Year Required Courses

- ◆ IEOR E4307: Forecasting
- ◆ IEOR E4407: Game Theory
- ◆ IEOR E4620: Pricing Models for FE

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- ◆ IEOR E4500: Applications Prog. for FE
- ◆ IEOR E4630: Asset Allocation
- ◆ ECON E3412: Econometrics
- ◆ Plus FE technical electives (6 pts total)

# Industrial Engineering: Junior Year Required Courses

- ◆ MATH E1210: Ordinary Differential Equations
- ◆ IEOR E3608: Math Programming (or E4004)
- ◆ IEOR E3106: Stochastic Models (or E4106)
- ◆ COMS W4111: Database Systems

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- ◆ IEOR E3402: Production Planning
- ◆ IEOR E4404: Simulation
- ◆ Plus technical electives

# Industrial Engineering: Senior Year Required Courses

- ◆ IEOR E4003: Industrial Econ. (or E4403)
- ◆ IEOR E4207: Human Factors
- ◆ IEOR E4705: Studies in OR

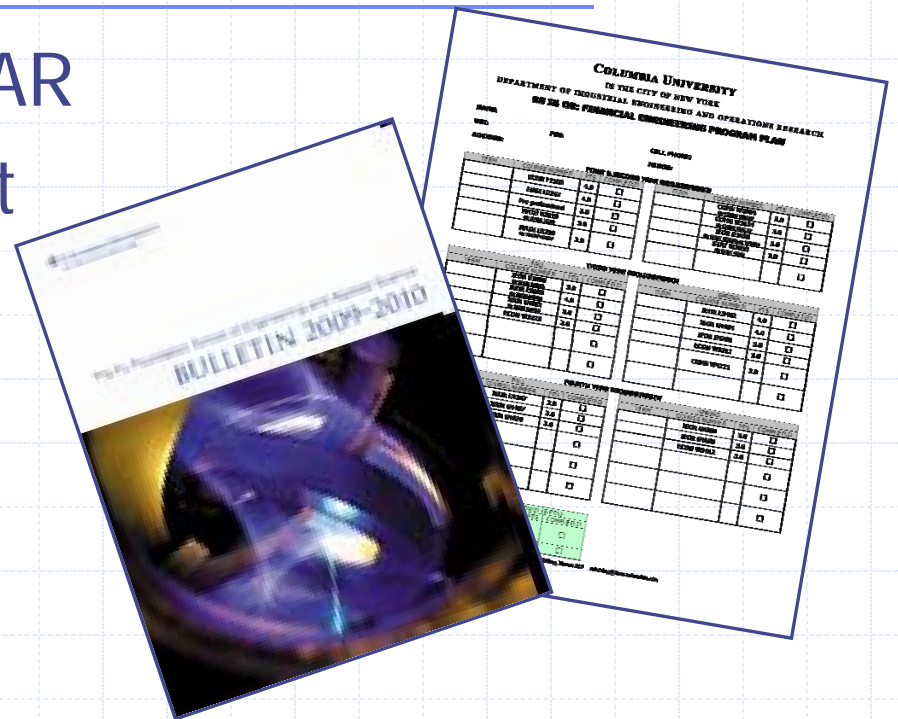
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- ◆ IEOR E4405: Production Scheduling
- ◆ IEOR E4412: Quality Control and Mgmt.
- ◆ IEOR E4510: Project Management
- ◆ Plus technical electives (need 9 pts total, pick two of IEOR E4210, E4418 or IEME E4310)



# Tools to Stay on Track

- ◆ Use the SEAS Bulletin from the year you declared your major
- ◆ Fill out your Program Plans– email to your advisor **and** [advising@ieor.columbia.edu](mailto:advising@ieor.columbia.edu)
- ◆ Seniors: Check your DAR
- ◆ All: If you neither meet your advisor nor email your program plan, a **hold will appear on your registration**





# Keep In Mind

- ◆ Drop Policy for required courses
  - Petition for approval; email [garud@ieor.columbia.edu](mailto:garud@ieor.columbia.edu)
- ◆ Study Abroad – Junior year spring best
- ◆ Internships are crucial
- ◆ Graduate School? Talk to your advisor
- ◆ Academic Dishonesty
  - Just don't do it; all cases are reported to the Dean

# Entrepreneurship, Leadership and Consulting (ELC) Club

Columbia entrepreneurship leadership and consulting club (ELC) is dedicated to enhance the spirit of entrepreneurship, the skills of leadership and the profession of consulting, within the student body of Columbia University.

Activities include:

- Training/Workshops
- Seminars
- Case study Groups
- Small Business Consulting
- Real Project consulting
- Business idea development
- Networking events

[http://www.columbia.edu/cu/elc/  
elc@columbia.edu](http://www.columbia.edu/cu/elc/elc@columbia.edu)



# INFORMS Chapter

The purpose of INFORMS is:

- ◆ Promote interest in EMS, FE, IE, and EMS
- ◆ Facilitate the exchange of ideas and information regarding methods and techniques in the field
- ◆ Foster a sense of community among students
- ◆ Provide mentoring for students seeking careers or higher education
- ◆ Connect students with speakers from industry and academia

[http://sites.google.com/site/cuinforms/  
CUINFORMS@gmail.com](http://sites.google.com/site/cuinforms/CUINFORMS@gmail.com)



# IEOR Department Events

Every year, the IEOR Department hosts a number of events, including:

- Seminars
- Social Events
- Faculty Lunches
- Field Trips
- Alumni Socials
- Panel Discussions



**IEOR Department**

**[www.ieor.columbia.edu](http://www.ieor.columbia.edu)**

**Room 313 Mudd**