IEOR MAJORS INFORMATION SESSION
WELCOME TO THE IEOAR DEPARTMENT
What is the IEOR Department?

- Department founded in 1918 in the FuSEAS
- One of nine Engineering Departments
- Department specializes in 2 disciplines and 2 concentrations:
  - Industrial Engineering
  - Operations Research
  - OR:Engineering Management
  - OR:Financial Engineering
The IEOR Toolkit

• We teach a toolkit to solve problems in various industries: finance, technology, service, manufacturing

• Toolkit consists of:
  – Mathematical skills (i.e. Probability, Calculus, Statistics)
  – Modeling skills (i.e. Simulation)
  – Programming skills (i.e. Java, C, SQL)
  – Soft skills (i.e. presentation, management)
  – Industry specific knowledge
The IEOR People

Currently:

- Undergraduates: 290
- M.S. Students: 331
- Ph.D. Students: 50
- Full-time Faculty: 23
- Adjunct Faculty: 39
- Affiliated Faculty: 12 (Business, Electrical, Statistics, Mathematics)
Academic Advisors

• All students are assigned an advisor

• Academic Advisors:
  – Daniel Bienstock
  – Soulaymane Kachani
  – Jay Sethuraman
  – Karl Sigman
  – Cliff Stein
  – Ward Whitt
Tools to Stay on Track

• Follow the SEAS Bulletin from your major declaring year

• Plan ahead: use the Program Plans by major
IEOR Curriculum: Sophomore Year

• Probability and Statistics
  – If OR, IE or OR:EMS, take SIEO W3600 (or SIEO W4150)
  – If you are interested in OR:FE, take IEOR E3658 (or STAT 4105) and IEOR E4307 (or STAT W3107/4107)
  – If you have already taken IEOR E3658 Probability you may not take SIEO W3600 or SIEO 4150; you need to take IEOR E4307 (or STAT W3107/4107)

• Data Structures
  – Take it right after COMS 1004 or 1007
Financial Engineering Concentration

• To be considered at the end of the Fall term: apply online by December 4\textsuperscript{th}
  – Responses will be emailed by third week of January

• To be considered at the end of the Spring term: apply online by May 13, 2016
  – Responses will be emailed by the third week of June.
The undergraduate advanced track is designed for IEOR undergraduate students with the desire to pursue graduate work. Students with a minimum cumulative G.P.A. of 3.4 and faculty approval have the opportunity to participate. Students are invited to apply to the track upon the completion of their sophomore year. Advanced track students are required to take higher level IEOR courses including:

- IEOR E4004 instead of IEOR E3608
- IEOR E4106 instead of IEOR E3106
- IEOR E4403 instead of IEOR E4003
- and MATH V2500

Students successfully completing the requirements of the undergraduate advanced track will receive recognition on their academic record.
Keep In Mind

• Add/Drop Policy for required courses (IEOR 3608, 3106 and 4404)
  – Petition for approval; email advising@ieor.columbia.edu

• Study Abroad - Junior year spring best

• Graduate School? Talk to your advisor

• Academic Dishonesty
  – Just don’t do it; all cases are reported to the Dean
<table>
<thead>
<tr>
<th>INDUSTRIES</th>
<th>COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINANCIAL SERVICES</td>
<td>HSBC, Deutsche Bank, Goldman Sachs, Merrill Lynch, Bank of America, BNP Paribas, Bloomberg, UBS, Credit Suisse, JPMorganChase, Morgan Stanley</td>
</tr>
<tr>
<td>PROFESSIONAL SERVICES</td>
<td>Google, accenture, KPMG, Deloitte, Booz</td>
</tr>
<tr>
<td>LOGISTICS &amp; SUPPLY CHAIN</td>
<td>UPS, FedEx, Kraft, freshdirect, US Army, GE</td>
</tr>
</tbody>
</table>
Recent graduates have found positions in prestigious organizations:

- Major Financial Services: Barclay’s Capital, Bank of America, BlackRock, Bloomberg, Citigroup, Credit Suisse, DE Shaw & Co., Deutsche Bank, JPMorgan Chase, Goldman Sachs, HSBC, Morgan Stanley, UBS
- Technology: Google
- Service/Manufacturing: Amazon.com, FreshDirect
- Public Service Agencies: Port Authority of NY/NJ, UPS
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.

http://elc-columbia.weebly.com/
elc@columbia.edu
ELC Activities

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