MS&E REGISTRATION
SUMMER & FALL 2015
MS&E DEGREE OVERVIEW

• Master of Science
  – Management Science & Engineering

• Program offered by Columbia Engineering in conjunction with Columbia Business

• Expected Completion:
  – August or December 2015

• Expected Degree Conferral:
  – October 2015 or February 2016
DEGREE REQUIREMENTS

• 36 credits
  – Three required core courses plus electives
• CORE: IEOR E4004, IEOR E4111, IEOR E4575, IEOR E4576 (COMPLETED BY SPRING 2015)
• No Pass/Fail Courses
• All courses must be completed at Columbia
• Remain in good standing
• Academic integrity
MS&E PROGRAM

• Core, 12 points: IEOR E4004, 4111, 4575, 4576

• Semi core, 18 points:
  – Decision, Risk & Operations (9 points)
  – Analysis (min. 3 points)
  – Management (min. 3 points)
  – and Analysis + Management = 9 points

• Breadth electives (in consultation with advisor), 6 points
DRO SUMMER OFFERINGS

- DROM B8106-060 Operations Strategy (1.5)
- DROM B8111-060 Analytics for Business Research (1.5)
- DROM B8858 Data Driven Entrepreneurship (3)

- Additional electives are offered during cross registration starting first week of May
IEOR SUMMER OFFERINGS

- IEOR E4712 Behavioral Finance (1.5)
- IEOR E4731 Credit Risk and Credit Derivatives (3)
- IEOR E4734 Foreign Exchange and Related Derivatives (1.5)
- IEOR E4999 Fieldwork (Departmental approval)
ADDITIONAL SUMMER OFFERINGS

• Refer to approved Summer 2015 elective list
• Additional courses offered in:
  – Computer Science
  – Economics
  – Mathematics
  – Statistics
  – Business School (Cross Registration)
• Courses not on the Summer 2015 elective list are not pre-approved; you must seek approval from info@ieor.columbia.edu.
FALL REGISTRATION

- Analytics
- Consulting
- Management
- Finance/Financial Engineering
- Entrepreneurship
- Decision, Risk, Operations
INTEREST IN ANALYTICS

• IEOR E4404 Simulation
• IEOR E4407 Game Theoretic Models of Operations
• IEOR E4574 Business Analytics for OR
• DROM B8120 Sports Analytics
• DROM B9122 Computing for Business Research
INTEREST IN CONSULTING

- IEME E4310 The Manufacturing Enterprise
- IEOR E4000 Production Management
- IEOR E4407 Game Theoretic Models
- IEOR E4408 Resource Allocation
- IEOR E4507 Healthcare Operations Management
- IEOR E4520 Applied Systems Engineering
- IEOR E4550 Entrepreneurial Business Creation
- IEOR E4571 Applied Consulting
- IEOR E4573 Design and Agile Project Mgmt. Eng. Lab
- IEOR E4711 Global Capital Markets
- IEOR E4998 Managing Tech. Innovations
- DROM B8107 Service Operations
- MGMT B8510 MSE Managerial Negotiations
INTEREST IN MANAGEMENT

- IEOR E4000 Production Management
- IEOR E4408 Resource Allocation
- IEOR E4507 Healthcare Operations Management
- IEOR E4520 Applied Systems Engineering
- IEOR E4550 Entrepreneurial Business
- IEOR E4998 Managing Tech. Innovations
- DROM B8107 Service Operations
- MGMT B8510 MSE Managerial Negotiations
INTEREST IN FINANCIAL ENGINEERING

HIGHLY SUGGESTED, FOUNDATIONAL:
• IEOR E4700 Intro to Financial Engineering
• IEOR E4711 Global Capital Markets

ELECTIVES:
• IEOR E4630 Pricing Models for FE
• IEOR E4712 Behavioral Finance (1.5)
• IEOR E4714 Risk Management (1.5)
INTEREST IN FINANCIAL ENGINEERING

ADVANCED COURSES:

• IEOR E4500 Applications Programming for FE
• IEOR E4710 Term Structure Modeling
• IEOR E4715 Commodity Derivatives (1.5)
• IEOR E4732 Computational Methods in Derivatives Pricing
INTEREST IN ENTREPRENEURSHIP

FOUNDATIONAL:

- IEOR E4550 Entrepreneurial Business
- IEOR E4573 Design and Agile Project Mgmt. Eng. Lab
- IEOR E4998 Managing Tech. Innovations

OPTIONAL:

- IEOR E4205 Studies in OR
- MGMT B8510 MSE Managerial Negotiations
DROM COURSES

The following courses are special courses from the Business school exclusive to MS&E students:

- DROM B8107 Service Operations
- DROM B8120 Sports Analytics
- DROM B9122 Computing for Business Research
- MGMT B8510 MSE Managerial Negotiations
CROSS REGISTRATION

• COLUMBIA BUSINESS:
  – Summer 2015: Starts first week of May
  – Fall 2015: Starts last week of August

• COLUMBIA SIPA:
  – No summer courses
  – Fall 2015: Rolling basis, on SSOL
YOUR ACTION ITEMS

• Research your courses: [ieor.columbia.edu/ieor-courses-topics](sieor.columbia.edu/ieor-courses-topics)
• Discuss selections with your advisor
• Register [ssol.columbia.edu/](ssol.columbia.edu/)
  – Summer 2015 courses (now opened)
  – Fall 2015 courses (opens 4/13)
  – Review your tuition e-Bill
• Review academic calendar [registrar.columbia.edu/](registrar.columbia.edu/)
THE IEOR OFFICE

3rd Floor Mudd Hall

info@ieor.columbia.edu

www.ieor.columbia.edu