Master of Engineering
Program InfORmation

(Updated September 2014)

Deadline for spring admission is **September 15th**
Deadline for fall admission is **December 1st**

ORIE Graduate Programs
201 Rhodes Hall
Cornell University
Ithaca, NY 14853

Phone: 607-255-9128
Email: orie@cornell.edu
Web: www.orie.cornell.edu
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ORIE at Cornell

- In Ithaca: Rhodes Hall, 2\textsuperscript{nd} & 4\textsuperscript{th} floors
- In Manhattan (CFEM): 55 Broad St, 3\textsuperscript{rd} floor
- 24 faculty members
- 35-45 PhD students
- 70-90 new MEng students each year
- 150-200 undergraduate students
MEng Program: Overview
Fall 2014 MEng Class

- 71 new MEng students
- 37 universities
- 23 undergraduate majors
- 9 countries

Class Statistics

- Median Undergraduate GPA: 3.68 / 4.00
- Median GRE - Q: 169  GRE - V: 156  GRE - A: 3.5
- 55% Male, 45% Female
- 75% International, 25% US Citizens
- 55% have UG degrees from US institutions
Program Framework

Practical Capstone
Engineering Design Project

Professional Development
Workshops, Seminars, Practitioner-led Courses, Internships

ORIE Core and Electives
Complemented by other Engineering, Business, Technical Courses
Recognized Success

- ADVANCED TRADING TOP 10 QUANT SCHOOLS 2012
- UPS George D. Smith Prize
- Best Quant Programs National Ranked Top 10 2013-14
Prerequisites

Before beginning the ORIE MEng program, each student must have successfully completed:

1. A standard *engineering calculus sequence*, including linear algebra and vector calculus

2. A *calculus-based probability and statistics course* equivalent to ENGRD 2700**

3. An *intermediate-level computer programming course* equivalent to ENGRD 2110**, conducted in a widely used language such as C, C++, Java, or MATLAB

4. Any concentration-specific prerequisites (see handbook)

**ENGRD 2700 and ENGRD 2110 are offered Fall, Spring, and Summer at Cornell**
MEng Requirements

• **30 credit hrs** of Technical coursework
  ➔ **19 credit hrs** of Technical Engineering coursework
  ➔ **12 credit hrs** of ORIE coursework
• ORIE Core Courses (18 credit hours)
• Case Studies Course* (ORIE 5110)
• MEng Project
• Colloquia* (ORIE 9100 and/or ORIE 9160)
  *Some exceptions, see handbook

MEng Handbook:
# ORIE Core Courses

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIE 5300: Optimization I (4 cr)</td>
<td>ORIE 5310: Optimization II (4 cr)</td>
</tr>
<tr>
<td></td>
<td>or ORIE 5311 (2 cr)</td>
</tr>
<tr>
<td></td>
<td>or ORIE 5370: Optimization Modeling in Finance (3 cr)</td>
</tr>
<tr>
<td>ORIE 5500: Prob and Stat II (4 cr) for non-FE students</td>
<td>ORIE 5510: Stochastic Processes (4 cr)</td>
</tr>
<tr>
<td></td>
<td>for non-FE students</td>
</tr>
<tr>
<td>ORIE 5580: Simulation Modeling (4 cr) ORIE 5581 (2 cr)</td>
<td>ORIE 5582 (2 cr) for FE students</td>
</tr>
<tr>
<td>for FE students</td>
<td></td>
</tr>
</tbody>
</table>
MEng Program: Concentration and Minor Options
MEng Concentrations and Minors

- Applied Operations Research
- Data Analytics
- Information Technology

~35-50%

- Financial Engineering

~45-55%

- *Manufacturing and IE*
- *Strategic Operations*

~10-15%

- *Systems Engineering Minor*

*Administered in conjunction with other programs*
# MEng Curriculum for AOR, DA, IT

## Fall Semester

<table>
<thead>
<tr>
<th>Core Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Optimization I (4 cr)</td>
</tr>
<tr>
<td>• Prob and Stat II (4 cr)</td>
</tr>
<tr>
<td>• Simulation Modeling (4 cr)</td>
</tr>
<tr>
<td>• Enterprise Engineering Colloquium</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Prep:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Studies (1 cr) or Design of Mfg Systems (4 cr)</td>
</tr>
</tbody>
</table>

## Spring Semester

<table>
<thead>
<tr>
<th>Core Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Optimization II (2 cr or 4 cr) or Optimization Modeling in Finance (3 cr)</td>
</tr>
<tr>
<td>• Stochastic Processes (4 cr)</td>
</tr>
<tr>
<td>• Enterprise Engineering Colloquium</td>
</tr>
</tbody>
</table>

## MEng Project (5 cr) Oct - May

<table>
<thead>
<tr>
<th>Electives:</th>
</tr>
</thead>
</table>

| Databases (CS), Machine Learning (CS), Yield Mgmt (HADM), Data-Driven Analytics (HADM), Marketing Research (JGSM), IS Mgmt (HADM), E-commerce (JGSM), Project Mgmt (CEE), Six Sigma (Sys Eng) ... |
Applied Operations Research

- Most *flexible* concentration option
- No additional prerequisites
- No specific elective requirements
- MEng Project: **ORIE 5980**
  - Wide variety of project topics
  - ORIE faculty serve as project advisors
  - Project slate presented and teams assigned in mid-October
Data Analytics

• Better for students who have already taken ORIE 5500 (or equivalent)

• Required Course Areas:
  ➢ Statistical Data Analysis (2 courses)
  ➢ Database/Spreadsheet Technology (1 course)
  ➢ Marketing and Pricing Strategy (1 course)

• Course options in handbook

• Suitable courses may be substituted by petition

• MEng Project: ORIE 5980
  ➢ At least one project will have a DA focus
Information Technology

• Better for students who have already taken one or more ORIE core courses (or equivalent)

• Required Course Areas:
  ➢ Technology and Infrastructure (1 course)
  ➢ Information Economics and Strategy (1 course)
  ➢ Managing IT Implementation (1 course)
  ➢ Approved Elective Course

• Course options in handbook

• Suitable courses may be substituted by petition

• MEng Project: ORIE 5980
  ➢ At least one project will have an IT focus
## ORIE 5980 Project Timeline
(AOR, DA, IT concentrations)

<table>
<thead>
<tr>
<th>When</th>
<th>Activity/Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>October</strong></td>
<td>Faculty advisors and/or sponsors describe projects. Students submit preferences and are assigned to teams.</td>
</tr>
<tr>
<td>November – December</td>
<td>Initial visits, fact-finding. Detailed project proposal/initial report due in December.</td>
</tr>
<tr>
<td>Early January</td>
<td>Teams return to campus <strong>2 to 3 weeks before classes begin</strong> and devote full energies to project work.</td>
</tr>
<tr>
<td>January – April</td>
<td>Project work continues throughout spring semester. Midterm report due in March.</td>
</tr>
<tr>
<td>Late April – May</td>
<td>Teams present project results to client management. Project reports are finalized, printed, and delivered.</td>
</tr>
</tbody>
</table>
# 2013-2014 ORIE 5980 Projects

<table>
<thead>
<tr>
<th>Project Client/ Organization</th>
<th>Project Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian National Railway</td>
<td>Crew Shortage Forecasting with Scenario Planning Analysis</td>
</tr>
<tr>
<td>Empire Merchants</td>
<td>Optimizing Pick Waves to Improve Process Efficiency</td>
</tr>
<tr>
<td>Hospital for Special Surgery in NYC</td>
<td>Simulation Modeling of Hospital Operations</td>
</tr>
<tr>
<td>MITRE Corporation</td>
<td>IRS Community Outreach</td>
</tr>
<tr>
<td>New York Presbyterian Hospital</td>
<td>Predicting Operating Procedure Duration</td>
</tr>
<tr>
<td>Ornge</td>
<td>Air Ambulance Simulation</td>
</tr>
<tr>
<td>Procter &amp; Gamble</td>
<td>Asia Counter Sales Data Analytics</td>
</tr>
<tr>
<td>Raymond Corporation</td>
<td>The Big Data Problem in Material Handling</td>
</tr>
<tr>
<td>Walmart.com</td>
<td>Must-Arrive-By-Date (MABD) Analysis and Forecasting</td>
</tr>
</tbody>
</table>
# MEng Curriculum for FE

## Fall Semester

**Core Courses:**
- Optimization I (4 cr)
- FE with Stochastic Calculus I (4 cr)
- Derivatives I & II (3 cr)
- Fixed Income Securities & Interest Rate Options (3 cr)
- Monte Carlo Simulation (2 cr)
- (Optional) Enterprise Engineering Colloquium

## Spring Semester

**Core Courses:**
- Optimization II (2 cr or 4 cr) or Opt. Modeling in Finance (3 cr)
- FE with Stochastic Calculus II (4 cr) or Credit Risk (3 cr) or Quant Methods in Risk Mgmt (3 cr)
- Stats for FE (4 cr) or Time Series Analysis (4 cr)
- Monte Carlo Methods in FE (2 cr)
- Investments & Portfolio Analysis (3 cr)
- (Optional) Enterprise Engineering Colloquium

## Summer

**Core Courses:**

- Computational Methods in Finance (3 cr)
- Financial Engineering Colloquium*

* May be taken for 1 or 2 credits, but can be taken for 1 credit only if student has already completed 1 credit of Enterprise Engineering Colloquium.

## Fall Semester (CFEM)

**Core Courses:**

- Bond Math & Mortgage-Backed Securities, High Frequency Trading, Corporate Credit Analysis, Quantitative Risk Mgmt

## Electives (6 crs total with >=2 crs at CFEM):

* Data Mining, Adv Stoc Processes, Game Theory, ...
* Multivariate Analysis (STSCI), Databases (CS), Machine Learning (CS), Comprehensive Financial Statement Analysis (JGSM), International Finance (JGSM), ...

## MEng Project (5 cr) Apr – Dec
Financial Engineering

• Additional Prerequisites:
  ➢ ORIE 5500 and basic finance are required.
  ➢ ORIE 5510 and C++ are strongly recommended.

• Highly structured 3-semester concentration covering:
  ➢ Mathematics
  ➢ Statistics
  ➢ Finance
  ➢ Computation

• MEng Project: ORIE 5961
  ➢ Wide variety of project topics in finance
  ➢ ORIE faculty serve as project advisors
  ➢ Project slate presented and teams assigned in April-May
# ORIE 5961 Project Timeline

(TE concentration)

<table>
<thead>
<tr>
<th>When</th>
<th>Activity/Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>April – May</td>
<td>Faculty advisors and/or sponsors describe projects.</td>
</tr>
<tr>
<td></td>
<td>Students submit preferences and are assigned to teams.</td>
</tr>
<tr>
<td>June – August</td>
<td>Students contact sponsors.</td>
</tr>
<tr>
<td></td>
<td>Background reading and preparation.</td>
</tr>
<tr>
<td>September – November</td>
<td>Project work continues throughout fall semester.</td>
</tr>
<tr>
<td></td>
<td>Midterm report due in October.</td>
</tr>
<tr>
<td>Late November – December</td>
<td>Teams present project results to client management.</td>
</tr>
<tr>
<td></td>
<td>Project reports are finalized, printed, and delivered.</td>
</tr>
</tbody>
</table>
## 2013-2014 FE Projects

<table>
<thead>
<tr>
<th>Project Client/ Organization</th>
<th>Project Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliance Bernstein</td>
<td><em>Price Pattern Driven by Options Activity</em></td>
</tr>
<tr>
<td>BBVA</td>
<td><em>Simulation of Selected Real World Aspects of Working on an Equity Derivatives Trading Desk</em></td>
</tr>
<tr>
<td>Cantor Fitzgerald</td>
<td><em>Competition and US Equity Market Microstructure</em></td>
</tr>
<tr>
<td>Citi</td>
<td><em>Citi Treasury and Consumer Risk Management</em></td>
</tr>
<tr>
<td>Guggenheim Partners</td>
<td><em>Constructing and Hedging a Portfolio of Prospective Merger and Acquisition Targets</em></td>
</tr>
<tr>
<td>HETCO</td>
<td><em>Illiquid Oil Volatility Trading</em></td>
</tr>
<tr>
<td>KALX</td>
<td><em>Hedging with Limit Orders</em></td>
</tr>
</tbody>
</table>
Manufacturing & Industrial Engineering Concentration

John Callister
Director of the Harvey Kinzelberg Entrepreneurship in Engineering Program
M&AE/OR&IE Departments
291 Grumman Hall/426 Rhodes Hall
jc62@cornell.edu
M&IE Required Courses

Fall Semester
• OR&IE 5100: Design of Manufacturing Systems
• OR&IE 5910: Manufacturing & IE Project Course
• OR&IE 9100: Enterprise Engineering Colloquium

Spring Semester
• NBA 5530: Accounting and Financial Analysis for Engineers
  or NBA 5020: Managerial Cost Accounting
• OR&IE 5910: Manufacturing & IE Project Course
• OR&IE 9100: Enterprise Engineering Colloquium
Select Three or More

1. ECE 4320 MicroElectro Mechanical Systems (MEMS) (Spring, 4 credits)
2. ECE 5830 Introduction to Technical Management (Fall, 3 credits)
3. NBA 6410 Supply Chain Management (Spring, 4 credits)
4. A&EP 6630 Nanobiotechnology (Fall, 3 credits)
5. CEE 5900 Project Management (Fall and Spring, 4 credits)
6. CEE 5930 Engineering Management Methods (Fall, 4 credits)
7. NCC 5580 Managing Operations (Fall and Spring, 3 credits)
8. OR&IE 5140 Model Based Systems Engineering (Fall, 4 credits)
9. NBA 6120 Disruptive Technologies (Fall, 2 credits)
10. OR&IE 5150 Economic Analysis of Engineering Systems (Spring, 4 credits)
11. OR&IE 5126 Principles of Supply Chain Management (Spring, 3 credits)

...and others by petition...just ask!
M&IE Projects

• Can be off campus, with real companies in the area. Our current arrangement is to have projects with Pall Trinity Micro Inc. in Cortland, NY. Requires frequent travel to the project company (a free shuttle is available if you do not have a vehicle).
The purpose of this project was to investigate production of the coalescer filter at Pall’s Cortland, NY production facility. The three main goals were as follows:

1. Identify and quantify manual tasks/operations on the line.
2. Update standard work documents for the line.
3. Recommend countermeasures that would increase throughput on the line, without sacrificing product quality.
M&IE Projects

• Can be on campus.

• We could really use some help on the Cornell FSAE racing team putting together the cost report and the marketing/production report.

• We hope to win this year!
Strategic Operations Immersion

Srinagesh Gavirneni
Jan Suwinski

Samuel Curtis Johnson Graduate School of Management
Strategic Operations Immersion

• A coherent, integrated view of an entire industrial enterprise:
  
  ➢ Overview of current issues and trends.
  
  ➢ Practical understanding of operations.
  
  ➢ Linkages between operations and other functions inside and outside the company.
  
  ➢ Top-level through floor-level issues.
  
  ➢ Classroom learning plus 15 site visits to see current practices in Operations.
The Model

Supply Chain Management

Globalization

Logistics
Coursework

• Format:
  ➢ One of seven Johnson School “immersion” courses.
  ➢ Your only class.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Management Core</td>
<td>2.5</td>
</tr>
<tr>
<td>SSO Practicum</td>
<td>4.5</td>
</tr>
<tr>
<td>Consulting Focus</td>
<td>3.0</td>
</tr>
<tr>
<td>Cost Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>1.5</td>
</tr>
</tbody>
</table>

➢ Starts in January one week earlier than normal classes.
Site Visits - Examples

- Guardian Glass
- Raymond
- Cigna
- Sentry Safe
- UPS
- Kionix
- Tompkins Trust
- Macy’s Logistics
- Goldman Sachs
- NY Hospital, Queens

- Welch Allyn
- GE Locomotive
- Kennedy Valve
- ABB
- Lord Corp. (3-day Kaizen)
- Trane
- Maines
- Quest Diagnostics
- Renaissance Hotels
- Johnson & Johnson
Typical Site Visit Schedule

• 1:00 PM          Arrive at Sentry Safe
• 1:00 PM – 2:00 PM Jim Brush, CEO, addresses the group and
discusses “Life with Wal-Mart”
• 2:00 PM – 3:00 PM Group A tours Molded (Bldg 900),
                  Group B tours SLS (Bldg 882)
• 3:00 PM – 4:00 PM Lean @ Sentry / Value Stream Map example
• 4:00 PM – 5:00 PM Group A tours SLS (Bldg 882),
                  Group B tours Molded (Bldg 900)
• 5:00 PM – 5:30 PM Question & Answer Session
• 5:30 PM          Departure from Sentry Safe
Guest Speakers

• Mike Train, Process Group VP – Emerson
• Steve Barry, VP Manufacturing – Sentry Safe
• Mark Pincott, VP – Mars
• Ed Evans, VP-HR – Univar Corporation
• Joe Bruce – Guardian Glass
• Jamie Hintlian – E&Y Consulting
• Bob Callahan, Chief of Staff – CTW Union
CORNELL SYSTEMS engineering

MASTERING COMPLEXITY

Linda Nozick, Program Director

- SYSTEM CONTEXT
- CUSTOMER ANALYSIS
- SYSTEM REQUIREMENTS
- FUNCTIONAL ANALYSIS
- VERIFICATION AND VALIDATION
- BEHAVIOR AND TRADE-OFF ANALYSIS
- REQUIREMENTS ALLOCATION
- SYSTEM ARCHITECTURE
Systems Engineering Minor Course Requirements

• Model-Based Systems Engineering (ORIE 5140)
• Systems Arch., Behavior, Optimization (ORIE 5142)
• Project Management (CEE 5900)
• Systems Engineering Project (ORIE 5940)
• Systems Elective (any MEng course with substantial systems content: see pre-approved list)
Contact Information

Cornell Systems Engineering
Director
202 Rhodes Hall
Cornell University
Ithaca, New York 14853
Telephone: 607.254.8998
Email: systemseng@cornell.edu
www.systemseng.cornell.edu
MEng Program:
Professional Development
Professional Development

• Career Services

• College Workshops and Seminars

• ORIE *MEng Connect* Program

• ORIE Online Profiles

• ORIE Alumni Connections

• CFEM Career Support for FE students
Career Services

Engineering Co-op & Career Services (ECS)

201 Carpenter Hall, 607-255-5006
eng-career@cornell.edu

http://www.engineering.cornell.edu/resources/career_services/
http://www.engineering.cornell.edu/resources/career_services/events.cfm

Cornell Career Services (CCS)

103 Barnes Hall, 607-255-5221
career@cornell.edu

http://www.career.cornell.edu/
http://www.career.cornell.edu/career/events/calendar.cfm
Career Services

- ECS and CCS offer *a full range* of workshops on resume writing, cover letters, networking, interviewing, job search strategies, etc.
- On-campus career fairs (Sept, Feb)
- On-campus recruiting
- Online resume submission (Cornell CareerNet)
- Resume and cover letter review
- Mock interviews
College Workshops and Seminars

• College of Engineering Orientation
  ➢ MEng Career Workshops:
    • How to craft a winning resume?
    • How to prepare for interviews?
    • How to speak persuasively in interviews?
  ➢ http://www.engineering.cornell.edu/academics/graduate/graduate_student_life/College-Of-Engineering-Orientation.cfm

• Engineering Management Ethics Workshop
  ➢ Held annually in early fall – open to all MEng students
  ➢ Cross-disciplinary facilitators and participants
MEng CONNECT Program

- 5-Day Workshop for ORIE MEng students focused on essential skills for success. Topics include:
  - Connecting with People
  - Preparing for the Job Hunt
  - Navigating the Job Hunt
  - Interviewing Essentials
  - Communicating in the Professional Environment
- Held in August and January before classes begin
- **Mandatory** for all incoming students
ORIE Online Profiles

http://www.orie.cornell.edu/academics/master/students.cfm

- Potential employers will be able to view your:
  - Name and Cornell email
  - Concentration and areas of interest
  - Expected graduation date
  - Photograph
  - Professional statement
  - Resume
ORIE Alumni Connections

- **ORIE 9100: Enterprise Engineering Colloquium**
  - Alumni speakers discuss their experiences across a wide spectrum of industries, functions, and ventures
  - During the fall semester, CEAA sponsors post-seminar gatherings for speakers and small groups of students (6-8 students each week).
  - [http://www.engineering.cornell.edu/alumni/association/seminar/](http://www.engineering.cornell.edu/alumni/association/seminar/)

- **ORIE Mentor Database**
  - ORIE’s own mentor database – use it to connect with alumni in your field of interest for career advice and professional networking.
  - [http://www.orie.cornell.edu/academics/master/search-for-a-mentor.cfm](http://www.orie.cornell.edu/academics/master/search-for-a-mentor.cfm)

*There is also a CCNet Mentor Database of Cornell alumni, employers, and parents who are willing to provide advice to students.*
# Professional Development at CFEM

<table>
<thead>
<tr>
<th>For Ithaca FEs</th>
<th>For CFEM FEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Career Boot Camp at CFEM</td>
<td>• Individual office hours at the beginning of your final semester</td>
</tr>
<tr>
<td>➢ In early September</td>
<td>• Resume critique and interview prep</td>
</tr>
<tr>
<td>• Career office hours (on demand)</td>
<td>• Mock interviews</td>
</tr>
<tr>
<td>• Resume books and resume drops</td>
<td>• Interviewing workshops</td>
</tr>
<tr>
<td>• Recruiting info sessions (broadcast from CFEM)</td>
<td>• Networking events with alumni and other professionals</td>
</tr>
<tr>
<td>• Interviews via long-distance conference calls</td>
<td>➢ Meet and Greet Wall Street</td>
</tr>
<tr>
<td>• Interview prep (on demand)</td>
<td>➢ GARP events</td>
</tr>
<tr>
<td>• Networking events</td>
<td>➢ Alumni Reunions</td>
</tr>
<tr>
<td>➢ Bus transportation to NYC will be provided for certain events</td>
<td>➢ Weekly speakers</td>
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</tbody>
</table>
MEng Program: Placement
ORIE MEng Placement

- May 2013 Graduates
  - At graduation: ~75%
  - After six months: >85%
- Summer 2013 Internships (FE): 100%
- December 2013 Graduates (FE)
  - At graduation: ~65%
  - After six months: 100%

- May 2014 Graduates
  - At graduation: ~85%
  - After three months: >95%
- Summer 2014 Internships (FE): 100%

Median Starting Salary was $70,000 – $75,000 (Non-FE) $80,000 – $85,000 (FE) in 2013
Source: ORIE Exit Surveys

Median Starting Salary was $70,000 – $75,000 (Non-FE) in May 2014
Source: ORIE Exit Surveys
Where do ORIE students get jobs?

- **Consulting:** Accenture, BCG, Deloitte, EY, Gotham Consulting, IBM, KPMG, Mercer Oliver Wyman, Opera Solutions, Princeton Consulting Group, PwC, Stroud Consulting...

- **Marketing Consulting:** Kurt Salmon Associates, Marketing Analytics, Revenue Analytics, Rosetta Marketing Strategies, ZS Associates, ...

- **Financial Services:** AIG, AMEX, Barclays, BNP Paribas, BlackRock, Capital One, Chartis Insurance, Citi, Goldman Sachs, HSBC, JP Morgan, KGS Alpha, Morgan Stanley, MSCI, Nomura Securities, RBS, UBS, ...

- **Technology:** Bloomberg, Capgemini, D.E. Shaw, Facebook, Google, Microsoft, MicroStrategy, Oracle, Palantir, Paragon Decision Technology, Reddwerks, Yahoo!, Walmart.com, Workday...

- **Manufacturing/Logistics:** Boeing, DuPont, GE, Intel, Johnson & Johnson, P&G, Schlumberger, VistaPrint, UPS, ...

- **Government Related:** Lockheed Martin, Mitre Corporation, Northrop Grumman, Raytheon, Sandia National Labs, ...
MEng Program: Applying and Financial Aid
Applying to the MEng Program

Deadline for spring admission is September 15th
Deadline for fall admission is December 1st

• Apply online through the Cornell University Graduate School: http://www.gradschool.cornell.edu/admissions/apply

• A completed application includes:
  ➢ Statement of purpose
  ➢ Transcripts
  ➢ 2 letters of recommendation (3 preferred)
  ➢ Official GRE scores (Cornell undergraduates exempt)
  ➢ Official TOEFL scores (if applicable)
  ➢ Prerequisites form (part of application)
  ➢ Resume (supplementary information section)
Spring Admission

Limited to those already at Cornell. All Spring applicants:

• Must be prepared to start MEng Project work during the previous fall semester, including 2-3 weeks in January before classes begin
• Should contact us before applying to discuss options
• Should not expect financial aid
• Should recognize that the bar is higher because you must incorporate yourself into the program immediately
• Must submit an Early Admit Study Plan if applying as an Early Admit student (Cornell undergraduates only)

Note: There is NO spring admission for the FE concentration unless you can fully satisfy FE curriculum requirements during the previous fall semester as a senior.
Financial Aid

• Like most professional degree programs, financial aid is very limited.

• MEng students may be awarded partial tuition fellowships or Graduate Teaching Specialist positions from the School of ORIE. MEng students are not eligible for ORIE research assistant positions.

• Many Spring GTS positions will be awarded based on merit late in the fall semester.

• Other Financial Aid possibilities:
  - http://www.engineering.cornell.edu/academics/graduate/financial_aid/meng/
  - http://www.engineering.cornell.edu/academics/graduate/degrees/meng/financial_aid.cfm
  - http://www.gradschool.cornell.edu/costs-and-funding/fellowships

• Loan Information:
  - http://www.gradschool.cornell.edu/costs-and-funding/loans
  - http://www.globalslc.com/
Special Awards for Cornell UGs

• **The Lynn Bussey Prize**
  Awarded annually at commencement to an outstanding student in ORE pursuing the ORIE MEng.

• **The Allan H. Mogensen Award**
  Awarded annually at commencement to an outstanding student in ORE pursuing the ORIE MEng.

• **The Geraldine and Sam Dell Master of Engineering Fellowship**
  Awarded annually to an exceptional Cornell UG pursuing the ORIE MEng. The recipient must demonstrate strong ethical grounding, leadership, teamwork, and have a fundamental understanding of the application of theory to practical business problems.
Additional Information

• MEng Program Information, Students, and FAQs
  ➢ http://www.orie.cornell.edu/academics/master/index.cfm
  ➢ http://www.orie.cornell.edu/academics/master/students.cfm
  ➢ http://www.orie.cornell.edu/academics/master/faq/index.cfm

• CFEM
  ➢ http://www.orie.cornell.edu/cfem

• Latest ORIE News
  ➢ http://www.orie.cornell.edu/news

• International Student and Scholars Office
  ➢ http://www.isso.cornell.edu

• Graduate School
  ➢ http://www.gradschool.cornell.edu
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