# Operation Research and Information Engineering M.Eng. Admissions Fall 2022

\*\*\*PLEASE READ THIS ENTIRE DOCUMENT\*\*\*

Thank you for your inquiry regarding the Master of Engineering (MEng) Program for the School of Operation Research and Information Engineering (ORIE) at Cornell University.

The information provided here is for application to the ORIE MEng Degree in Ithaca.

# Master of Engineering Degree Options:

Six concentrations and one minor are offered through the M.Eng. program in ORIE, providing students ample opportunity to pursue a wide range of careers.

- Applied Operations Research
- Data Analytics
- Financial Engineering
- Information Technology
- Manufacturing and Industrial Engineering
- Strategic Operations
- Systems Engineering (minor)

Unlike other concentrations, <u>Financial Engineering (FE)</u> is specifically designed to be a three-semester program, where students spend their first two semesters (fall and spring) in Ithaca at the main campus, then their last semester (second fall term) in New York City as part of Cornell Financial Engineering Manhattan (CFEM). CFEM is located on the Cornell Tech campus but is not part of Cornell Tech.

In addition to the MEng degree in Ithaca, ORIE also offers the MEng degree at Cornell Tech in NYC. This program focuses on data science and operations analytics. It is a professionally-oriented degree designed to provide you with the skills necessary to work in major tech companies as an analyst and information scientist. For more information on the M.Eng. at Cornell Tech: <a href="https://tech.cornell.edu/programs/masters-programs/master-in-operations-research-and-information-engineering/">https://tech.cornell.edu/programs/masters-programs/master-in-operations-research-and-information-engineering/</a>

#### What is the difference between the ORIE MEng in Ithaca and the ORIE MEng at Cornell Tech?

These are completely different programs. They do not offer the same concentrations — for instance, Cornell Tech does NOT offer the Financial Engineering concentration. These two degree programs have completely separate application processes, deadlines, and prerequisite requirements.

# Application Deadline:

The deadline for application submission for our MEng program for the Fall 2022 semester will be <u>December 1, 2021</u>. We do not have rolling admissions. No late submissions will be accepted.

By the deadline, you must submit your portion of the application materials (see below). We understand that Letters of Recommendation and/or Official Test Scores may arrive after the December 1<sup>st</sup> deadline. However, your application will not be considered 'Complete' until at least 2 LoRs and official test scores have arrived. Your application cannot be reviewed until it is complete.

#### Communications with ORIE

We may send email to you through the CollegeNet application portal. Please check your SPAM/Junk email folder regularly so that you do not miss any important communications we have sent out.

All communications to ORIE should be sent to <a href="mailto:orie@cornell.edu">orie@cornell.edu</a> Please understand that we experience a high volume of email and it may take 48-72 hours to hear back from us. Please do not send multiple emails regarding the same issue. This only adds to the volume of email we receive and slows our response time to all applicants.

When sending any email correspondence, please provide your First and Last Name and the email address you used when applying to the program so that we can quickly locate your file. Once you submit your application, you will receive a "transaction ID#". Please include this with your email correspondence as well.

# Items to be Submitted for your ORIE M.Eng. Application:

You will need to submit the following items **by** the application deadline date in order for your application to be considered complete and to receive consideration for full funding.

- Application: Apply online: https://gradschool.cornell.edu/admissions/apply/apply-now/
- Statement of Purpose: Expected length is roughly 1 1 % pages.
- Transcript(s): One transcript from each university you have attended. Transcript(s) can be uploaded into your online application; do not submit hard copy versions. See below for suggestions on how to submit your transcript(s) online.
- **Recommendation Letters**: Two recommendations are required; three are preferred. Your letters of recommendation MUST be received electronically through the ApplyWeb system.
- Resume: This is required and there is a specific field available for you to upload it as an attachment.

#### International Students

- TOEFL scores from ETS if applicable (must be officially submitted to Cornell University by ETS; photocopies are not acceptable). TOEFL scores are \*\*ONLY\*\* valid for up to two (2) years from the original test date.
- **IELTS Scores** if applicable. Have IELTS send your Test Report Form (either by postal mail, or electronically) to *Cornell University -- Graduate Admissions*. Please do not e-mail a scanned copy, or mail a photocopy of your TRF.

# **Submitting Your Application Online:**

The School of Operation Research and Information Engineering requires you to submit your application online at <a href="https://gradschool.cornell.edu/admissions/apply/apply-now/">https://gradschool.cornell.edu/admissions/apply/apply-now/</a>. The application fee of \$105 is non-refundable and you will be required to pay with a major credit card.

You will be able to submit all of your materials online – Statement of Purpose, Transcripts, Resume/CV. Your Recommenders will also be able to submit your recommendation letters online. Please do not submit any hard copy materials of any kind by mail or courier. Hard copy materials will not be processed or considered as part of the review process.

# Uploading of Scanned Transcripts into CollegeNet (online application system)

- 1. Scan at the lowest dpi document (use under 200 dpi whenever possible).
- 2. Ensure that the institution name and other identifying marks are not missed during the scanning process and that it is clearly legible and can print on 8  $\frac{1}{2}$ " x 11" size paper.
- 3. Save your document as a PDF file.
- 4. Scanning in gray scale or black and white may produce the best results.
- 5. If the scanned file is too large then make a photocopy first, then scan the photocopy.
- 6. If you upload a copy of your transcript into your online application, you are \*\*NOT\*\* required to submit an official hard copy version of it in order for your application to be considered complete. You will only need to submit an official hard copy transcript if you are made an offer of admission and you choose to accept it.

#### No Hard Copy Items Should be Submitted by Mail:

- All application materials should be submitted ONLINE.
- Do NOT mail any hard copy application materials to accompany your application.

# **International Applicants:**

**TOEFL**: Minimum scores required for admission to Cornell are as follows:

15 – Listening 20 – Reading 22 – Speaking 20 – Writing

- In addition, the School of ORIE requires a minimum total TOEFL score of 100.
- You must meet the minimum score requirements in each of the four areas of the TOEFL in order to be considered for admission to Cornell.
- Official TOEFL Scores are only considered valid by ORIE for up to two (2) years from the original test date when the exam was taken.
- You need to use the **Institutional Code of 2098** for Cornell University (no Departmental Code is necessary) to have ETS submit your TOEFL scores to Cornell.

Please plan accordingly, as it may take 10-14 days to send scores to Cornell and an additional few days to match your scores to your application.

**IELTS:** Minimum IELTS Score required for admission is an Overall Band Score of **7.0** or higher.

- When you register for the exam, you may select up to five institutions to which you would like to have your Test Report Form (TRF) mailed. You may also submit a request to your test center to have additional TRFs sent to institutions not originally listed on your registration form.
- Have IELTS send your Test Report Form electronically to Cornell University -- Graduate Admissions. Please do not e-mail a scanned copy, or mail a photocopy of your TRF.

For questions regarding IELTS Score submission, please contact the Cornell Graduate School directly at gradadmissions@cornell.edu.

Be aware, that if you are an international applicant and your TOEFL or IELTS scores do not meet our minimum requirements, *you will <u>not</u> be considered for admission*. These minimum scores are determined by the Cornell Graduate School and all graduate fields at Cornell must adhere to them.

Go to the link below to review the policy.

https://gradschool.cornell.edu/admissions/prepare/english-language-proficiency-requirement/

# There will be no exceptions considered if you are not able to meet the minimum English Language Proficiency Requirements.

The TOEFL/IELTS requirement may be waived *only* if the applicant meets at least one of these criteria:

- If the applicant is a native citizen of the United States, the United Kingdom, Ireland, Australia, New Zealand or Canada (except Quebec). Applicants, who are citizens of India, Pakistan, the Philippines, Hong Kong, or Singapore, are *not* exempt from the TOEFL requirement.
- If the applicant has studied in full-time status for at least two (2) academic years within the last five (5) years in the United States, the United Kingdom, Ireland, Australia, or New Zealand, or with English language instruction in Canada or South Africa. You must submit a transcript that shows you have attended college in one of these approved locations.

ANY questions regarding the English Language Proficiency Requirement should be sent to gradadmissions@cornell.edu

#### **GRE Scores**

GREs – <u>For the Fall 2022 admission cycle, we do NOT require GREs.</u> You will not be allowed to add GRE scores to your application. We ask that you refrain from putting GRE scores on your resume or other application materials.

# What are the Minimum Requirements for all ORIE M.Eng. Program applicants?

Our admission decisions are not based only on GPA and standardized test scores; we look at a wide variety of factors. If you have slightly lower scores or GPA but have other strengths that mitigate the weaknesses in the above quantitative metrics, we would still encourage you apply.

Please be aware that the submission of GRE scores is only valid for the admissions cycle *you are specifically applying* for. Cornell does **not** carry over scores from previous years.

## MEng Program Prerequisites:

**Prerequisites are required**. They **must** be satisfied prior to matriculation:

- A standard engineering calculus sequence, including linear algebra (with eigenvalues and eigenvectors), and vector calculus, similar in content and rigor to Cornell courses MATH 1910, MATH 1920, and MATH 2940.
- An introductory engineering probability and statistics course similar in content and rigor to Cornell course ENGRD 2700.
- An intermediate-level computer programming course in a general programming language such as C, C++, Java, or Python, similar in content and rigor to Cornell course ENGRD 2110. Courses that entail programming applications, but where programming is not the primary focus are not acceptable substitutes. Courses in statistical modeling languages, such as R and SAS, are not acceptable substitutes.

#### Additional prerequisites for the Financial Engineering concentration:

- An introductory finance course. Courses in economics and accounting are not acceptable substitutes.
- Strongly recommended: A second semester of calculus-based probability, statistics, and/or stochastic processes, similar in content and rigor to Cornell courses ORIE 3500 and/or ORIE 3510. Courses in which probability and statistical methods are used, but where theory is not the primary focus are not acceptable substitutes, nor are professional exam credentials (e.g., CFA, FRM).
- Strongly recommended: A course in differential equations, similar in content and rigor to Cornell course MATH 2930.
- Strongly recommended: Proficiency with R and/or Python.

#### Additional prerequisites for the Data Analytics concentration:

• A two-semester sequence of calculus-based probability and statistics theory, similar in content and rigor to Cornell courses ENGRD 2700 and ORIE 3500. Courses in which probability and statistical methods are used, but where theory is not the primary focus are not acceptable substitutes, nor are professional exam credentials (e.g., CFA, FRM).

### **Knight Scholarship:**

Those MEng applicants that are also considering pursuit of an MBA degree should consider applying for the Knight Scholarship. To be considered, students need to complete an online application for MEng admission, write a 500-word essay and submit a one-page resume. The essay should describe experiences that motivated you to pursue engineering and business, student's interests and achievements, and his/her future career goals. Deadline for submission is February 1, 2022. (No late submissions will be considered.)

Because of the December 1 application deadline for the ORIE MEng, you may submit your application for the MEng degree without the Knight Scholarship Essay and send it to <u>orie@cornell.edu</u> by January 28<sup>th</sup> for us to upload the essay to your application by the February 1<sup>st</sup> deadline.

# Frequently Asked Questions:

Please visit <a href="https://www.orie.cornell.edu/orie/programs/graduate-programs/meng-degree-ithaca/meng-faqs/meng-admission-faq">https://www.orie.cornell.edu/orie/programs/graduate-programs/meng-degree-ithaca/meng-faqs/meng-admission-faq</a> regarding the application process for additional information on how to apply to ORIE.

# Requesting an Application Fee Waiver:

In cases of extreme financial need, the Cornell Graduate School will consider a request for a fee waiver. A letter of request for a waiver and documentation of need, such as a letter from a college financial aid office, must accompany the application. You will need to contact the Cornell Graduate School directly at gradadmissions@cornell.edu to request permission for a fee waiver.

# Submitting an Updated Transcript

After you submit your application online (by the December 1<sup>st</sup> deadline), you will be able to provide an updated transcript with fall term grades. You cannot upload this yourself – you will need to send a pdf to <u>orie@cornell.edu</u> and we will upload on your behalf.

# **Checking Your Application Status**

You can log into your application account via the Cornell online system and check the status of your M.Eng. application materials <a href="https://gradschool.cornell.edu/admissions/apply/apply-now/">https://gradschool.cornell.edu/admissions/apply/apply-now/</a>. This system will be updated regularly as your items are received. Your application will be marked "Complete" once official test scores and letters of recommendation have been received.

The admissions committee will begin review of applications on December 1<sup>st</sup>. Decisions will be sent electronically as they are made. Applicants will be notified of the committee decision by March 31<sup>st</sup>.

#### Additional Information:

https://www.orie.cornell.edu/orie/programs/meng-degree-ithaca/admissions

For additional information or any other admissions related questions, please contact: ORIE@cornell.edu

Thank you once again for your interest in our M.Eng. program.