

# School of Engineering

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## Mission

**The mission of the Manhattan University School of Engineering is to prepare each student for a productive and rewarding career in engineering or a related profession.**

Through Engineering Graduate Degree Programs and the individual graduate engineering courses, the School of Engineering seeks to provide for the academic and professional needs of those who are already engaged in engineering (or related) professions or those who, having completed their undergraduate preparation, desire to enter immediately into advanced study. Post-baccalaureate programs offered by the School of Engineering are intended to prepare professionals for advanced level technical and administrative positions or for admission to doctoral programs at other institutions. All these programs lead to the Master's Degree and are available on a full-time or a part-time basis and also through the School of Engineering Seamless Master's Program. Courses are generally conducted in the late afternoons or early evenings during the fall and spring semesters or terms. Continuing Education Hour (CEH) opportunities for PE license renewal are also available.

## Application Procedures

Application admission to all programs in the School of Engineering is through the Office of Admissions. An on-line application can be accessed via the Office of Admissions Web page. The completed form accompanied by the application fee (non-refundable) must be submitted to the Office of Admissions. Applicants for admission are responsible for having official transcripts of all undergraduate and graduate courses mailed directly to the Office of Admissions, paying the application fee, submitting letters of recommendation, and submitting required standardized test scores.

Official transcripts (not student copies) of all undergraduate and graduate records must be sent to the Office of Admissions by the institutions issuing them. Applicants who file an application before the baccalaureate degree has been conferred may be accepted pending the successful completion of their undergraduate work. A final transcript must be received in the Office of Admissions prior to course registration.

Graduates of Manhattan University should contact the Office of the Registrar requesting that an official transcript be sent to the Office of Admissions.

An application is not complete until all the necessary materials and application fee have been received by the Office of Admissions. Incomplete applications cannot be processed. Students who file an application and whose official transcripts arrive after the deadline date cannot be assured that their application will be processed in time for the semester for which they are applying.

For best consideration, filing of the graduate application should be completed before May 1st for summer session application; August 10th for fall session applicants, and January 7th for spring session applicants; however, applications are reviewed on a continuous basis. Students seeking admission into the full-time engineering programs must have

their application for the fall session completed by March 1st if they are applying for a fellowship or scholarship for the fall semester.

The director of the graduate engineering program to which a person is applying and the Dean of Engineering review the application and supportive documents and forward their recommendations to Admissions. The Office of Admissions informs the applicant of the decision. Accepted students will receive the instructions for registration at the beginning of the session for which they have been accepted.

The documents submitted in support of application cannot be returned to the applicant nor can they be duplicated for any purpose. All documents received are part of the records of the University.

## Admission

Applicants for admission into any graduate program in the School of Engineering must hold, before beginning the program, a baccalaureate degree from an accredited university or institution acceptable to Manhattan University. In addition, they must meet any specific requirements as stated in the for the respective programs. **An undergraduate cumulative grade point average (GPA) of 3.00 on a 4.00 scale is normally required for admission to all engineering graduate programs, although other factors can be considered in the decision for admission.** Applicants are not required to submit results of the Graduate Record Examination (GRE). However, GRE scores may enhance the application. All applicants to masters degree programs in the School of Engineering must submit two recommendation letters and a short resume.

Admission into graduate engineering programs will be granted as a matriculated student, one seeking to fulfill the requirements for a degree. A student may be granted permission to take an approved graduate course on a non-matriculated basis or, in special cases, as an audit. A non-matriculated student is one earning graduate credit for a specific course but not necessarily working for a degree. For both non-matriculated and auditing students, tuition and fees are the same as for matriculated students.

A student who lacks undergraduate prerequisites for a specific program may be asked to satisfactorily complete certain undergraduate (bridging) courses as a non-matriculated student. When these courses are completed satisfactorily, the student may be matriculated after a review by the graduate program director and the Dean of the School of Engineering. Such undergraduate (bridging) courses will not count towards the graduate degree.

Students requesting to take graduate courses as a non-matriculated student must have the necessary prerequisites for those courses. Students may not register for more than 12 credits as a non-matriculated student.

All students must comply with immunization regulations as previously stated in the introductory section of the catalog.

Students who take graduate courses at Manhattan University on a non-matriculated basis and apply thereafter for admission to a graduate program as a matriculated student will be informed at the time of acceptance which courses may be applied to that degree program.

Students who have earned a master's degree or who are pursuing a master's degree in one engineering program from Manhattan University and desire to seek admission into another program must file a new application with the Office of Admissions.

All documents of applicants who have been accepted and for extenuating circumstances cannot register for courses during the session for which they were admitted will be kept on file for two years. The documents will be destroyed if the applicant does not register for courses within that period.

## Seamless Master's Degree Program

Academically qualified undergraduate engineering students at Manhattan University may be invited to participate in a Seamless Master's Degree program in chemical, civil, computer, electrical, environmental, or mechanical engineering. Qualified students who enter Manhattan University with Advanced Placement and/or undergraduate university credit will generally be in a position to take graduate courses during their senior year at Manhattan University while completing the requirements for the Bachelor's degree. It may then be possible to obtain a Master's degree with only an additional year of study.

Undergraduate students who have earned a minimum of 3.00 cumulative GPA by the end of the first semester of their junior year are eligible to apply for the Seamless Master's Degree program upon the recommendation of a member of the engineering faculty. Transfer students may be considered after completing courses at Manhattan University. All students participating in the Seamless Master's Degree program are required to submit an application for admission to that graduate program. The online application must be submitted in the senior year through the Office of Admissions. Students are required to complete the baccalaureate degree with a cumulative GPA of 3.00, or higher, prior to continuing for the additional year of graduate study.

Students admitted into the Seamless Master's Degree program may enroll in 500, 600, or 700 level courses while completing the requirements for the Bachelor's Degree. These courses will count for either undergraduate or graduate credit but not for both degree programs. Undergraduate students in the Seamless Master's Degree program and those not in the program who take dual-listed undergraduate-graduate courses cannot take the undergraduate level course for undergraduate credit then later take the graduate level course for graduate credit. Because some required graduate courses are offered on a two-year rotation, admitted students must meet with the chair of the major department prior to their senior year in order to select appropriate 500, 600, and 700-level courses to satisfy the Master's Degree requirements. There is no tuition increase for enrolling in graduate courses during the senior year provided the student does not exceed the total number of credits permitted for the semester. Qualified students are limited to a total of six credits of graduate level courses as undergraduates as described elsewhere in the undergraduate catalog.

After completing the undergraduate degree requirements, financial support may be available from individual departments for the additional year of graduate study. This support typically includes research assistantships, graduate assistantships, academic scholarships and grants, and industrial fellowships.

## Visiting Students

Students who are matriculated in a graduate program at another institution and who wish to take a course (or courses) at Manhattan University may do so as non-matriculated students for individual courses for which they have the prerequisites. For non-matriculated students, tuition and fees are the same as for matriculated students.

## International Student Applicants

The University accepts international students for its full-time graduate programs in the School of Engineering. Application procedures and admission criteria and information can be found in the individual sections of the catalog. In general, the University cannot accept these students into its part-time graduate programs. The student who is accepted and receives a student visa must be enrolled in each term of the academic year for a minimum of 9 credits. Such students must complete the program within 18 months.

International student applicants should submit their admission application, official transcripts, and the admission fee four months before the beginning of the session they wish to enter. In addition, they must submit a notarized statement that they have sufficient funds to finance their education and their maintenance. Many of the sources of financial assistance are limited to the residents of the United States.

Unless exempted, all international students applying from foreign countries must take the TOEFL (Test of English as a Foreign Language) or acceptable equivalent and have the test results sent to the Office of Admissions. A minimum TOEFL score of 80 (internet based test), 213 (computer based exam), or 550 (paper based exam) will satisfy Manhattan University admission requirements and criteria for issuance of the I-20 form. However, admission and issuance of an I-20 form is also possible for students with TOEFL scores below 80, 213 or 550 levels for the internet, computer, and paper based exams, respectively, provided they successfully complete an approved English as a Second Language course at another institution or an acceptable substitute at Manhattan University. The School of Engineering will also accept IELTS (International English Language Testing System) scores with a minimum of 6.5 on the 9.0 scale, TOEIC (Test of English for International Communication) scores with minimum score of 690, and Duolingo English Test scores of 110 or higher.

Some international students are exempted from the English proficiency requirement based on where the undergraduate degree was awarded. International students graduating from a four-year undergraduate engineering program in the United States accredited by the Engineering Accreditation Commission (EAC) of ABET ([www.abet.org](http://www.abet.org)) will not need to submit an English proficiency exam score. Graduates of undergraduate engineering programs in English speaking countries that are signatories to the Washington Accord along with the USA (<http://www.washingtonaccord.org/>), specifically Australia, Canada, Ireland, New Zealand, and the United Kingdom, will not need to submit English proficiency exam scores. A complete list of exempted countries is available from Graduate Admissions.

An international student who is informed of acceptance must deposit a non-refundable fee which will be credited toward tuition. This fee is non-refundable if the student does not register but will be credited to their account for two years. The amount of the fee is stated in the acceptance letter. When the fee and other required documents (e.g., CFR, financial

documents, and passport) are received, the student will be sent an I-20 form which must be presented to the United States authority to arrange for an F1 student visa.

## **Degree Requirements**

All engineering graduate programs require a minimum of thirty credit hours of graduate course work. One exception is the masters of science degree in construction management which requires thirty-three credit hours. A minimum cumulative grade point average of 3.00 in all courses in the program of study is also required. A student must remain in good academic standing, as described earlier in this graduate catalog, or the student will be subject to dismissal from the university. Other degree requirements, if present, are detailed under each graduate program description.

## **Graduate Engineering Course Concentrations**

Modern engineering practice increasingly demands integration of knowledge and expertise from more than one engineering discipline. It is often desirable for the practicing engineer to acquire specific knowledge outside their area of expertise without devoting the time and effort to earn an advanced degree. To address these needs, the School of Engineering offers Graduate Engineering Course Concentration through which various combinations of related courses from the Engineering Graduate Core and from departmental offerings can be used to complete the requirements for a Graduate Engineering Course Concentration in a particular area of study. While the Graduate Engineering Course Concentration is not an engineering degree, it does allow an individual, who is qualified to take the courses and meets any prerequisite requirements, an opportunity to acquire knowledge and expertise in a focused area of engineering in a relatively short period of time. Typically, an individual will be required to complete successfully three or four courses in a particular topical area to earn a Graduate Engineering Course Concentration. While approval of a Department Chair or Graduate Program Director is required to enroll in a graduate course, admission to the Graduate Program is not required to participate in a particular Course Concentration Program. It is expected, however, that individuals desiring to take graduate-level courses in the Course Concentration will have a baccalaureate degree in either an engineering field, a science or applied science field, or mathematics. Specific information regarding Graduate Engineering Course Concentration is available from the Engineering Dean's Office or from individual Department Offices on the School of Engineering website, [www.manhattan.edu/academics/engineering/](http://www.manhattan.edu/academics/engineering/) (<http://www.manhattan.edu/academics/engineering/>).

## **Continuing Education Hours**

The School of Engineering is a New York State approved provider of Continuing Education Hours (CEH) for PE license registration. The School of Engineering offers a variety of short courses in a variety of formats (e.g., on-campus, on-site) for Professional Engineers to earn Continuing Education Hours. In addition, graduate courses and other offerings will also generally count as CEH's to be used for professional license registration. For details concerning short course offerings and schedules, contact the Office of the Dean of Engineering (718-862-7281).