

# **MASTER OF ENGINEERING**

## **Biological and Environmental Engineering**

### **Program Requirements**

The Master of Engineering (MEng) is a professional degree program intended for those who have a Bachelors degree or equivalent in an engineering or closely related science field from a college or university of recognized standing. Students in the MEng program must have a Biological and Environmental Engineering (BEE) faculty advisor who is a member of the BEE graduate field, and they must satisfactorily complete a curriculum approved by that advisor which meets the degree requirements of the program.

Cornell students who are within one to eight credits of completing their engineering baccalaureate degree may apply to the MEng program as “early admit students”. The early admit application must be made in the semester prior to the last undergraduate term and, if admitted, the student must submit an intended set of master of engineering courses approved by their MEng advisor prior to the start of their studies. Early admit students complete their Bachelors degree and spend at least one full-time semester enrolled in the graduate school prior to the conferral of their MEng Degree. Early admit students are classified as undergraduate students and pay undergraduate tuition during the early admit semester.

All MEng students must register for a minimum of one semester in the graduate school. Graduate tuition rates are usually announced in January of each year.

#### **Degree Requirements**

1. At least 30 semester hours, of which at least 24 credit hours must be in the College of Engineering. Overall 30 credits includes up to 9 credits of BEE 5951-5952.
2. At least 28 hours must be taken for letter grade, with no grades below C-.
3. A minimum of 3 credits to a maximum of 9 credits of BEE 5951-5952, Master of Engineering Design Project, completed for letter grade. The design project requires a final report that is filed in Cornell’s electronic library and a formal presentation of the project to the graduate faculty.
4. A minimum of 9 credits must be taken in the Biological and Environmental Engineering Department (no more than 6 credits of design project can be used for these credits).
5. The remaining credits are approved by the faculty advisor, who must be a member of the Engineering College Faculty. Courses covering subject matter previously taken may not be repeated for credit.

## **Admission Requirements**

Applicants with a cumulative undergraduate GPA greater than 2.7 may be admitted directly by decision of the BEE graduate field. Students with a cumulative GPA between 2.5 and 2.7 may be admitted conditionally by recommendation of the field and approval of the College of Engineering Master of Engineering Committee. (The GPA values are based on a 4.3 scale.)

Applicants may be admitted with science and engineering degrees that are relevant to research programs in the graduate field of Biological and Environmental Engineering. It is expected that master of engineering candidates who do not have a comprehensive background in engineering will use the program as an opportunity to reinforce their understanding of core topics and expand their breadth of knowledge in the field by enrolling in appropriate advanced undergraduate courses. Candidates develop their course plan together with their MEng. faculty advisor.

Applicants to the program need to apply directly to the Grad School at <http://www.gradschool.cornell.edu/>

## **Contact Persons**

Applicants are encouraged to contact the Director of Graduate Studies or the Graduate Studies Coordinator in Riley-Robb Hall to learn more about the BEE MEng program.

Professor Peter Hess, Director of Graduate Studies  
Department of Biological and Environmental Engineering  
202 Riley-Robb Hall  
Cornell University  
Ithaca, NY 14853  
Voice: (607) 255-2495; Fax: (607) 255-4449  
[pgh25@cornell.edu](mailto:pgh25@cornell.edu).

Brenda Marchewka, Student Services Coordinator  
Department of Biological and Environmental Engineering  
207 Riley-Robb Hall  
Cornell University  
Ithaca, NY 14853  
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[bls19@cornell.edu](mailto:bls19@cornell.edu)

(Adopted 2/86, Revised 9/87 to reflect Graduate Professional Programs Committee Requirements and previous field policy 9/77, Revised 9/91 to reflect Department's and degree's name changes, Revised 5/92 to reflect the 1992 changes in Rules and Policies for the Master of Engineering Degree. Revised 2/94, Revised 8/95 to update entrance requirements. Revised Spring 1998, 1/01, 11/07, 10/08. 8/09, 12/09)

**FIELD OF BIOLOGICAL AND ENVIRONMENTAL ENGINEERING  
MASTER OF ENGINEERING  
DEGREE REQUIREMENTS**

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Name \_\_\_\_\_ Cornell ID No \_\_\_\_\_

E-mail \_\_\_\_\_ Concentration \_\_\_\_\_

Advisor \_\_\_\_\_

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**MINIMUM REQUIREMENTS FOR THE DEGREE**

1. Satisfactory completion of a minimum of 30 credit hours Actual \_\_\_\_\_
    - a. At least 28 credit hours taken for letter grade, with no grades below C- Actual \_\_\_\_\_
    - b. Minimum of 24 credit hours must be in College of Engineering Actual \_\_\_\_\_
    - c. Minimum of 3 to a maximum of 9 Design Project credits Actual \_\_\_\_\_
    - d. Minimum of 9 credits in Biological and Environmental Engineering Actual \_\_\_\_\_  
(No more than 6 credits of Design Project can be used)
    - e. Maximum of 9 credits transferred into program (attach transcript) Actual \_\_\_\_\_
  
  2.
    - a. Two (2) residence units earned \_\_\_\_\_
    - b. Early Admit + one (1) residence unit earned \_\_\_\_\_
  
  3. Satisfactory completion of Design Project including presentation Date \_\_\_\_\_
  
  4. Minimum GPA of 2.5 based on credits at Cornell and transfer credits with letter grades GPA \_\_\_\_\_
  
  5. Completion of degree within 4 years of admission Date Admitted \_\_\_\_\_  
Date Completed \_\_\_\_\_
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**COLLEGE OF AGRICULTURE & LIFE SCIENCES, BEE REGISTRAR**

Final verification of all degree requirements:

**Student Approval**

Date \_\_\_\_\_ Signature \_\_\_\_\_

**Advisor Approval**

Date \_\_\_\_\_ Signature \_\_\_\_\_

**Field Approval**

DGS

Date \_\_\_\_\_ Signature \_\_\_\_\_

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## COURSEWORK

Course Number	Credit Hours	Term Enrolled	Grade	Course Title
<b>1. Courses in Biological and Environmental Engineering</b>				
(9 credits minimum of BEE courses, includes up to 6 credits of BEE 5951-5952. Overall 30 credits includes up to 9 credits of BEE 5951-5952.)				
<u>BEE 5951</u>	_____	_____	_____	<u>MEng Design Project</u>
<u>BEE 5952</u>	_____	_____	_____	<u>MEng Design Project</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
<b>2. Other Engineering Courses</b>				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
<b>3. Non-Engineering Courses</b>				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
<b>4. Total Credits</b>	_____	<b>(min. of 30: ___28 with letter grades, ___24 in Engr. Coll.)</b>		

MEng Design Project Title \_\_\_\_\_

MEng Design Project Presentation

Date \_\_\_\_\_  
 Time \_\_\_\_\_  
 Location \_\_\_\_\_

Submission of project report to eCommons  
 eCommons \_\_\_\_\_

Date \_\_\_\_\_

Baccalaureate Degree Confirmation

Date Conferred \_\_\_\_\_  
 Institution \_\_\_\_\_  
 Major \_\_\_\_\_