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.

Special requirements for students without an undergraduate engineering degree:

- 6. Graduating MEng students are required to have taken the following courses to graduate:
 - differential equations (equivalent of Cornell's MATH 2930)
 - physics (equivalent of Cornell's PHYS 1112)
 - chemistry (equivalent of Cornell's CHEM 2070)
 - college level biology course

These courses will not count towards the credits students need for their MEng degree at Cornell. These courses may be taken at Cornell or elsewhere.

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 <u>http://www.gradschool.cornell.edu/</u>

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 <u>pgh25@cornell.edu</u>.

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(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

Name	Cornell ID No
E-mail	Concentration
Advisor	

MINIMUM REQUIREMENTS FOR THE DEGREE

1.			Actual	
	a. At least 28 credit hours taken for letter grade, with no grades below C-			
	b. Minimum of 24 credit hours must be in College of Engineer	ering	Actual	
	c. Minimum of 3 to a maximum of 9 Design Project credits		Actual	
	d. Minimum of 9 credits in Biological and Environmental Eng	gineering	Actual	
	(No more than 6 credits of Design Project can be used)			
	e. Maximum of 9 credits transferred into program (attach tran	script)	Actual	
		_		
2.	a. Two (2) residence units earned			
	b. Early Admit + one (1) residence unit earned	arly Admit + one (1) residence unit earned		
3.	atisfactory completion of Design Project including presentation Date			
4.	Minimum GPA of 2.5 based on credits at Cornell and transfer	r credits		
	with letter grades		GPA	
5.	Completion of degree within 4 years of admission	Date Admitted		
		Date Completed		

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

COURSEWORK

	Course Number	Credit Hours	Term Enrolled	Grade	Course Title
1.	Courses in Biological and Environmental Engineering (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>				MEng Design Project
	BEE 5952				MEng Design Project
2.	Other Engineer	ring Courses			
3.	Non-Engineerin	ng Courses			
4.	Total Credits		(min. of 30:	28 with lette	er grades,24 in Engr. Coll.)
MI	Eng Design Proje	ct Title			
M	Time	ct Presentation	n		
Su	bmission of proje eCommons		Commons	Dat	.e
Ba	ccalaureate Degre Date Conferred Institution Major				