

ENGINEERING: ENERGY SYSTEMS, MENG

for the degree of Master of Engineering in Engineering, Energy Systems Concentration

The MEng in Engineering, Energy Systems Concentration is a professionally oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science degree in that it is a terminal degree and not a pathway to a doctoral program. Concentrations under the MEng in Engineering major include Aerospace Systems Engineering (<http://catalog.illinois.edu/graduate/engineering/engineering-meng/aerospace-systems/>), Autonomy and Robotics (<http://catalog.illinois.edu/graduate/engineering/engineering-meng/autonomy-robotics/>), Digital Agriculture (<http://catalog.illinois.edu/graduate/engineering/engineering-meng/digital-agriculture/>), Energy Systems (p. 1), Instrumentation and Applied Physics (<http://catalog.illinois.edu/graduate/engineering/engineering-meng/instrumentation-applied-physics/>), and Plasma Engineering (<http://catalog.illinois.edu/graduate/engineering/engineering-meng/plasma-engineering/>).

for the degree of Master of Engineering, Major in Engineering, Energy Systems Concentration

For additional details and requirements refer to the program's website (<https://energysystemsmeng.engineering.illinois.edu/curriculum/>) and the Graduate College Handbook (<http://grad.illinois.edu/gradhandbook/>).

This degree program can be completed either on campus or online; the requirements are listed below:

Requirements

Code	Title	Hours
Core Courses		12
ENG 471	Seminar Energy & Sustain Engrg	
ENG 571	Theory Energy & Sustain Engrg	
ABE 436	Renewable Energy Systems	
NPRE 480	Energy and Security	
or NPRE 481	Writing on Technol & Security	
Electives (approved by academic advisor)		16
Professional Development (choose from these 3 options):		4
ENG 572	Professional Practicum (4 hours)	
ENG 573	Capstone Project (4 hours)	
• Select a different course with professional development components in consultation with advisor		
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
A minimum of 20 credit hours must be taken from the University of Illinois Urbana-Champaign campus.	

A minimum of 12 500-level credit hours, with a minimum of 8 hours of ENG or NPRE 500-level coursework.

A maximum of one 1-credit-hour course may be applied toward the minimum 12 500-level credit-hour requirement.

No courses used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.

Minimum GPA: 3.0

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1. Develop an ability to analyze energy systems at a holistic level and perform lifecycle assessment.
2. Obtain an understanding (at the graduate level) of fundamental limits to energy production, transmission, storage and consumption due to physics and chemistry constraints.
3. Understand the concepts of engineering and economic optimization, and learn their application.
4. Develop an interdisciplinary breadth of understanding of the variety of approaches to development, deployment and sustainability of global energy resources.
5. Develop an understanding of the broader policy and decision-making context in which development of and deployment of energy systems takes place.
6. Complete a study of a particular problem relevant to energy systems in a manner analogous to a professional career assignment.

Admission

Students with bachelor's or master's degrees in engineering or related fields will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. Admission is possible for the spring term, but most admissions are for the fall term. Full details of admission requirements are on the Energy Systems Concentration website (<https://energysystemsmeng.engineering.illinois.edu/>).

All applicants whose native language is not English are required to submit TOEFL (<http://www.toefl.org/>) or International English Language Testing System (IELTS) (<http://www.ielts.org/>) scores as evidence of English proficiency. Minimum admission requirements (<https://grad.illinois.edu/admissions/instructions/04c/>) are set by the Graduate College.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

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Contact: Amy McCullough

Department website (<https://npres.illinois.edu/>)

Energy Systems MEng Program website (<https://energysystemsmeng.engineering.illinois.edu/>)
405 Engineering Hall, 1308 W Green St, Urbana, IL 61801
(217) 300-2378

Program email

Grainger College of Engineering

Grainger College of Engineering website (<https://grainger.illinois.edu/>)

Admissions

Energy Systems MEng, Graduate Admissions & Requirements (<https://energysystemsmeng.grainger.illinois.edu/program/admissions/>)
Graduate College Admissions (<https://grad.illinois.edu/admissions/apply/>)