NUCLEAR, PLASMA & RADIATOLGICAL ENGINEERING, BS AND ENGINEERING: ENERGY SYSTEMS, MENG

for the joint degree of Bachelor of Science in Nuclear, Plasma & Radiological Engineering and Master of Engineering in Engineering, Energy Systems Concentration

department website: https://npre.illinois.edu/
department faculty: Nuclear, Plasma, & Radiological Engineering Faculty (https://npre.illinois.edu/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. Current Illinois students enrolled in the College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student’s knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site. Current Grainger Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program. Admission decisions are based on overall academic performance, letters of reference, and statement of purpose. Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given “provisional admission.” Students provisionally admitted to the program:

• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.*

Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student’s traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

The 124-hour B.S. degree from the B.S.-M.Eng. program is ABET accredited as long as the credits taken from the 128-hour B.S. degree don’t reduce math and basic science below 30 credit hours, nor engineering topics below 45 credit hours, and don’t include senior design if applicable.

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Course Requirements

B.S. Component (124 hours):

• Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  • The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student’s undergraduate curriculum.
• Illinois undergraduate student minimum residence requirement satisfied.
• Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

• Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
• Satisfy Illinois’ graduate student minimum residence requirement.
• Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.