

# NUCLEAR ENGINEERING AND ENGINEERING PHYSICS, MS

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

### MAJOR REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW–Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

### CURRICULAR REQUIREMENTS

#### Requirement Detail

Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits

**Minimum Graduate Coursework Requirement** 15 credits must be graduate-level coursework from nuclear engineering, math, physics, chemistry, computer science, or any other engineering department except E P D. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: <https://policy.wisc.edu/library/UW-1244> (<https://policy.wisc.edu/library/UW-1244/>).

**Overall** 3.00 GPA required.

**Graduate GPA Requirement** Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <https://policy.wisc.edu/library/UW-1203> (<https://policy.wisc.edu/library/UW-1203/>).

**Other Grade Requirements** Courses in which grades of BC, C, or below are received cannot be counted toward the degree except as follows:

- Credits of C will be allowed provided they are balanced by twice as many credits of A or by four times as many credits of AB,
- Credits of BC will be allowed provided they are balanced by twice as many credits of AB or by an equal number of credits of A.

**Assessments and Examinations** Students who complete the thesis pathway must write a thesis and defend it orally in front of a three-member committee (at least two must be members of the UW–Madison Graduate Faculty).

**Language Requirements** No language requirements.

### REQUIRED COURSES

The following courses, or courses with similar material content, must be taken prior to or during the course of study: N E 427 Nuclear Instrumentation Laboratory; N E 428 Nuclear Reactor Laboratory or N E 526 Laboratory Course in Plasmas; N E 408 Ionizing Radiation or N E/MED PHYS 569 Health Physics and Biological Effects.

Only one course (maximum of 3 credits) of independent study (N E 699 Advanced Independent Study, N E 999 Advanced Independent Study) is allowed (regardless of pathway selected).

#### Thesis Pathway<sup>1</sup>

Maximum of 12 credits for thesis; at least 8 additional credits of N E ([http://guide.wisc.edu/courses/n\\_e/](http://guide.wisc.edu/courses/n_e/)) courses numbered 400 or above; remaining credits (also numbered 400 or above) must be in appropriate technical areas<sup>2</sup>; at least 9 credits must be numbered 500 and above; and up to 3 credits can be seminar credits.

#### Non-Thesis Pathway<sup>1</sup>

At least 15 credits of N E ([http://guide.wisc.edu/courses/n\\_e/](http://guide.wisc.edu/courses/n_e/)) courses numbered 400 or above; remaining 15 credits (also numbered 400 or above) must be in appropriate technical areas<sup>2</sup>; at least 12 credits must be numbered 500 or above; and up to 3 credits can be seminar credits.

<sup>1</sup> These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

<sup>2</sup> Appropriate technical areas are: Engineering departments (except Engineering and Professional Development), Physics, Math, Statistics, Computer Science, Medical Physics, and Chemistry. Other courses may be deemed appropriate by a student's faculty advisor.