

# NUCLEAR ENGINEERING AND ENGINEERING PHYSICS, MS

## ADMISSIONS

### ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	December 15
Spring Deadline	September 1
Summer Deadline	December 15
GRE (Graduate Record Examinations)	Not required but may be considered if available.*
English Proficiency Test	Every applicant whose native language is not English, or whose undergraduate instruction was not exclusively in English, must provide an English proficiency test score earned within two years of the anticipated term of enrollment. Refer to the Graduate School: Minimum Requirements for Admission policy: <a href="https://policy.wisc.edu/library/UW-1241">https://policy.wisc.edu/library/UW-1241</a> ( <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> ).
Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	3

\* GRE scores are optional. Applicants may submit GRE scores, but are not required to do so. Applications without scores are not placed at a disadvantage. However, received scores will be considered as part of our holistic evaluation of applications.

### APPLICATION REQUIREMENTS AND PROCESS

#### Degree

For admission to graduate study in Nuclear Engineering and Engineering Physics, an applicant must have a bachelor's degree in engineering, mathematics, or physical science, and an undergraduate record that indicates an ability to successfully pursue graduate study. International

applicants must have a degree comparable to a regionally accredited US bachelor's degree. All applicants must satisfy requirements that are set forth by the Graduate School (<https://grad.wisc.edu/apply/requirements/>).

It is highly recommended that students take courses that cover the same material as these UW-Madison courses before entering the program:

Code	Title	Credits
<b>Differential Equations</b>		<b>3</b>
MATH 319	Techniques in Ordinary Differential Equations	
or MATH 320	Linear Algebra and Differential Equations	
<b>Advanced Mathematics</b>		<b>3</b>
MATH 321	Applied Mathematical Analysis	
<b>Nuclear Physics</b>		<b>3</b>
N E 305	Fundamentals of Nuclear Engineering	
<b>Materials Science, Metallurgy, or Solid-State Physics</b>		<b>3</b>
M S & E 350	Introduction to Materials Science	
or M S & E 351	Materials Science-Structure and Property Relations in Solids	
<b>Heat Transfer or Fluid Mechanics</b>		<b>3</b>
CBE 320	Introductory Transport Phenomena	
<b>Mechanics</b>		<b>3</b>
PHYSICS 311	Mechanics	
or E M A 202	Dynamics	

Descriptions of course content can be accessed through Guide (<http://guide.wisc.edu/courses/>). Applicants may enter without having taken these courses. However, in such cases, the applicants must inform their advisors, who will help them plan courses of study that will provide adequate background for our department's graduate curriculum.

#### GPA

The Graduate School requires a minimum undergraduate grade point average of 3.0 on a 4.0 basis on the equivalent of the last 60 semester hours from the most recent bachelor's degree. In special cases, applicants with grade point averages lower than 3.0 who meet all the general requirements of the Graduate School may be considered for admission on probation.

#### Advisor Selection Process

MS applicants who intend to complete a thesis are encouraged to identify potential faculty advisors and seek a confirmation. Review the department Research (<https://engineering.wisc.edu/departments/nuclear-engineering-engineering-physics/research/>) and People (<https://directory.engr.wisc.edu/need/faculty/>) websites and contact those whose research interests align with yours. Only faculty members listed with the titles of Assistant Professor, Associate Professor, or Professor, can serve as graduate advisors. Do not contact Emeritus faculty, Lecturers, Research Scientists, or Faculty Associates. You are also encouraged to inquire about possible funding opportunities. If a faculty member agrees to be your advisor, ask the person to email an acknowledgment to [neepgradadmission@engr.wisc.edu](mailto:neepgradadmission@engr.wisc.edu).

MS applicants who intend to do a course work only degree will be assigned a faculty advisor after admission.

## APPLICATION MATERIALS

Each application must include the following:

- Graduate School Application (<https://grad.wisc.edu/apply/>)
- Academic transcripts
- Statement of purpose
- Resume/CV
- Three letters of recommendation
- GRE Scores (**optional - see below for additional information**)
- English proficiency score (**if required**)
- Application fee

### Academic Transcript

Within the online application, upload the undergraduate transcript(s) and, if applicable, the previous graduate transcript. Unofficial copies of transcripts are required for review, but official copies are required for admitted applicants. Do not send transcripts or any other application materials to the Graduate School or the Nuclear Engineering and Engineering Physics department unless requested. Please review the requirements set by the Graduate School (<https://grad.wisc.edu/apply/requirements/>) for additional information about degrees/transcripts.

### Statement of Purpose

The University of Wisconsin-Madison Graduate School and the Department of Nuclear Engineering & Engineering Physics have the following guidelines for the Statement of Purpose:

- Be specific about your interest and knowledge particular to this program:
  - Have you read an article by one or more faculty members?
  - Has your advisor specifically directed you to this program?
  - Do you have other ties to this program and/or school?
- Pick out the pertinent facts about your academic and professional interests that make you a good fit with the program and institution to which you are applying. (A statement of purpose is not a place to list everything you have done.)
- Describe research experiences regardless of whether they are related to your current interests.
- Being self-motivated, curiosity-driven, and goal-oriented are important qualities for aspiring PhDs in Nuclear Engineering and Engineering Physics. To provide evidence of these qualities, you may write about relevant experiences you have had.
- Perseverance and the ability to overcome adversity are also important. Again, discuss relevant experiences you may have to provide evidence.
- Mention extra-curricular achievements to illustrate additional dimensions of your personality.
- Explain (briefly) any incongruity in your application material, such as a low semester grade.
- Our page limit is two and a half pages, but there is no obligation to write long statements.

For more information from the Graduate School, please review their webpage (<https://grad.wisc.edu/apply/prepare/>).

### Resume

Upload your resume in your application.

### Three Letters of Recommendation

These letters are required from people who can accurately judge the applicant's academic and/or research performance. It is highly recommended these letters be from faculty familiar with the applicant. Letters of recommendation are submitted electronically to graduate programs through the online application. See the Graduate School for FAQs (<https://grad.wisc.edu/apply/>) regarding letters of recommendation. Letters of recommendation are due by the deadline listed above.

### GRE Scores

GRE scores are optional. Applicants may submit GRE scores, but are not required to do so. Applications without scores are not placed at a disadvantage. However, received scores will be considered as part of our holistic evaluation of applications.

### English Proficiency Score

Every applicant whose native language is not English, or whose undergraduate instruction was not in English, must provide an English proficiency test score. The UW-Madison Graduate School accepts TOEFL, IELTS, and Duolingo scores. Your score will not be accepted if it is more than two years old from the start of your admission term. Country of citizenship does not exempt applicants from this requirement. Language of instruction at the college or university level and how recent the language instruction was taken are the determining factors in meeting this requirement.

For more information regarding minimum score requirements and exemption policy, please see the Graduate School Requirements for Admission (<https://grad.wisc.edu/apply/requirements/>).

### Application Fee

Application submission must be accompanied by the one-time application fee. It is non-refundable and can be paid by credit card (MasterCard or Visa). Additional information about the application fee may be found here (<https://grad.wisc.edu/apply/>) (scroll to the 'Frequently asked questions').

Fee grants are available through the conditions outlined here by the Graduate School (<https://grad.wisc.edu/apply/fee-grant/>).

## REENTRY ADMISSIONS

If you were previously enrolled as a graduate student in the Nuclear Engineering and Engineering Physics program, have not earned your degree, but have had a break in enrollment for a minimum of a fall or spring term, you will need to re-apply to resume your studies. Please review the Graduate School requirements for previously enrolled students (<https://policy.wisc.edu/library/UW-1230/>). Your previous faculty advisor (or another Nuclear Engineering and Engineering Physics faculty advisor) must be willing to supply advising support and should e-mail the Nuclear Engineering and Engineering Physics Graduate Student Services Coordinator regarding next steps in the process.

If you were previously enrolled in a UW-Madison graduate degree, completed that degree, have had a break in enrollment since earning the degree and would now like to apply for another UW-Madison program; you are required to submit a new student application through the UW-Madison Graduate School online application. For Nuclear Engineering and Engineering Physics graduate programs, you must follow the entire application process as described above.

## **CURRENTLY ENROLLED GRADUATE STUDENT ADMISSIONS**

Students currently enrolled as a graduate student at UW-Madison, whether in Nuclear Engineering and Engineering Physics or a non-Nuclear Engineering and Engineering Physics graduate program, wishing to apply to this degree program should contact the Graduate Admissions Team to inquire about the process and deadlines several months in advance of the anticipated enrollment term. Current students may apply to change or add programs for any term (fall, spring, or summer).

## **QUESTIONS**

If you have questions, contact [neepgradadmission@engr.wisc.edu](mailto:neepgradadmission@engr.wisc.edu).