



# SNAPSHOT

2023 v3

## DEPARTMENT OF NUCLEAR ENGINEERING & ENGINEERING PHYSICS

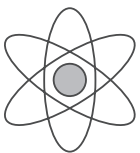
### TOP THINGS TO KNOW



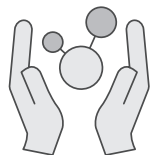
Since the U.S. Department of Energy's Nuclear Energy University Program began more than a decade ago, **UW-Madison has been the largest recipient of research funding.** Those research projects place us at the forefront of advanced reactor technology development and have led to collaborations with many companies developing novel reactor designs, including TerraPower, NuScale, General Atomics, Kairos, and Terrestrial Energy.



Our alumni have a long history in important technical leadership positions across multiple industries. Whether at the helm of the nation's largest fleet of nuclear power plants, serving as commissioner in the US Nuclear Regulatory Commission, holding positions appointed by the president, or founding their own companies, our alumni are saving this planet and exploring the rest.



We are among a handful of universities who still maintain a nuclear reactor, not only for research, but as a "classroom" for our nuclear engineering students. For them, watching a reactor pulse—the flash of light caused by ejecting a control rod and allowing the reactor to rapidly increase in power—is an exhilarating experience.



Our department is known for its impressive array of nation- and world-leading fusion research facilities, and for its collaborations with even larger facilities around the world. **Students routinely complete their research on some of the most important facilities in the world,** including DIII-D and W7-X.

90

**Undergraduate students licensed** by the Nuclear Regulatory Commission to operate the UW nuclear reactor (as of 2022).

94%

**EP majors that go on to graduate school** after completing their BS.

3

**UW-Madison spinoff companies:** Realta Fusion, Type One Energy, SHINE Technologies

### STUDENT ENROLLMENT

57

UNDERGRADUATE  
Nuclear engineering

30

UNDERGRADUATE  
Engineering physics

73

GRADUATE  
Nuclear engineering and  
engineering physics

### NATIONAL PUBLIC RANKING according to U.S. News & World Report

2<sup>nd</sup>

GRADUATE

## DEGREES OFFERED

## STARTING SALARIES\*

### BS

- Engineering Physics
- Nuclear Engineering

### MS

- Nuclear Engineering and Engineering Physics

### PhD

- Nuclear Engineering and Engineering Physics

**\$70,000+**  
UNDERGRADUATE

**\$98,000+**  
GRADUATE

\*approximate per year

**\$12.5M+**  
AVERAGE ANNUAL  
RESEARCH FUNDING

## AREAS OF EMPHASIS IN THE GRADUATE PROGRAM

### Nuclear systems engineering

Research in radiation transport and neutronics, materials science and engineering, and thermal-hydraulics, as well as risk analysis and systems integration studies for fission reactors, fusion systems, and medical applications of nuclear technology.

### Plasma science and engineering

Emphasizes high temperature plasmas for fusion energy applications (both magnetic and inertial), low temperature plasmas for industrial applications, such as plasma processing and plasma aided manufacturing, and basic plasma physics.

## RESEARCH AREAS

Experimental plasma physics  
Plasma theory and computation  
Nuclear materials  
Nuclear systems  
Energy transitions, policy, and security

## RESEARCH FACILITIES

Max Carbon Radiation Science Center

- UW Nuclear Reactor
- Ion Beam Laboratory
- Characterization Lab for Irradiated Materials

Pegasus-III Fusion Experiment

Helically Symmetric eXperiment (HSX)

Center for Plasma Theory and Computation

Institute for Nuclear Energy Systems

Nanoscale Imaging and Analysis Center

## DEPARTMENT CHAIR



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Visit us on the web.



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