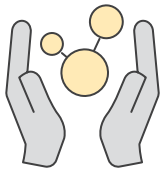


SNAPSHOT

DEPARTMENT OF

NUCLEAR ENGINEERING & ENGINEERING PHYSICS

UNIVERSITY OF WISCONSIN-MADISON COLLEGE OF ENGINEERING



TOP THINGS TO KNOW

Our department is home to two unique fusion experiments, Pegasus-III and the Helically Symmetric eXperiment (HSX). Students have the opportunity to gain hands-on experience in large experimental teams, making them sought after by top national and international facilities.



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 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.



STUDENT ENROLLMENT

Fall semester 2024

105

Undergraduate
nuclear engineering

45

Undergraduate
engineering physics

78

Graduate
nuclear engineering and engineering physics



NATIONAL PUBLIC RANKING

U.S. News & World Report

#2

Undergraduate

#2

Graduate



DEGREES CONFERRED

Conferred year 2023-24

105

Undergraduate

69

Graduate



DEGREES OFFERED

BS

Engineering Physics
Nuclear Engineering

MS, PhD

Nuclear Engineering and
Engineering Physics

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

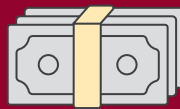
Emphasizes high temperature plasmas for fusion energy applications (both magnetic and inertial), low temperature plasmas for industrial applications, such as plasma processing and plasma aided manufacturing, and basic plasma physics.



RESEARCH FUNDING

\$16.7M

Total value of research expenditures in 2024



STARTING SALARY

(approximate per year)

\$67K+

Undergraduate

\$98K+

Graduate



RESEARCH AREAS

- Experimental plasma physics
- Plasma theory and computation
- Nuclear and fusion materials
- Nuclear systems engineering
- 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

93

Undergraduate students licensed by the Nuclear Regulatory Commission to operate the UW nuclear reactor (as of 2024).

94%

Engineering physics majors that go on to graduate school after completing their BS.

3

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

Visit our site



Paul Wilson

Professor of Nuclear Engineering
and Department Chair

(608) 263-0807
chair@neep.wisc.edu



**Department of
Nuclear Engineering
& Engineering Physics**
UNIVERSITY OF WISCONSIN-MADISON