



THE UNIVERSITY OF WISCONSIN-MADISON ENGINEERING PHYSICS

INFO

DEPARTMENT CHAIR



Paul Wilson
Grainger Professor of
Nuclear Engineering
(608) 263-0807
chair@ep.wisc.edu

ENROLLMENT

(FALL 2019)

EM ▶ BS—184 GRAD—18
NE ▶ BS—76 GRAD—69
EP ▶ BS—23



NUCLEAR ENGINEERING

Undergraduate
Ranking

2

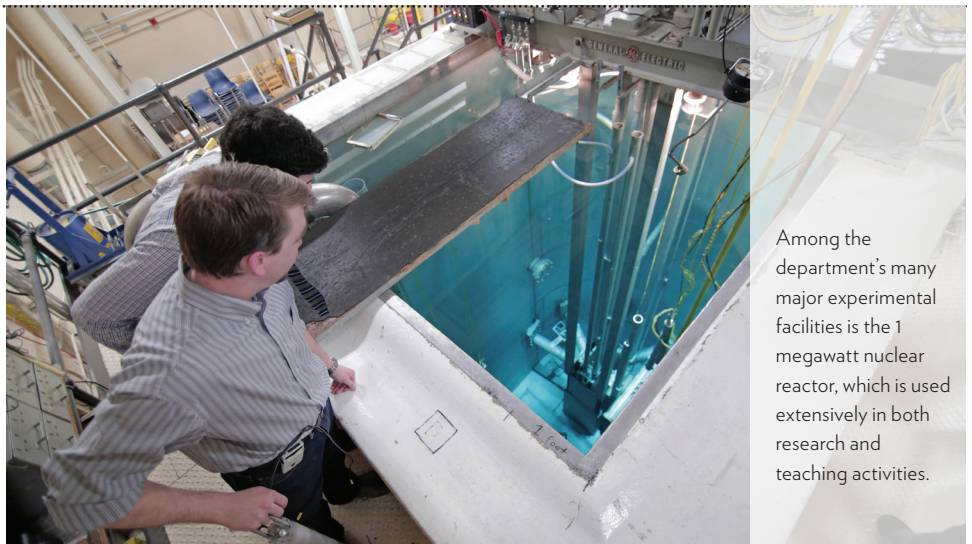
Graduate
Ranking

4

RESEARCH EXCELLENCE

Our department integrates fundamental physics, mathematics, and engineering principles to solve societal grand challenges, from cancer and heart disease to clean energy to space travel. Collaborations between our 4th ranked nuclear engineering program and world-class engineering mechanics program yield research interests in:

- Fundamental understanding of biological and novel materials
- Fusion science and technology
- Nuclear energy systems
- Fluid & structural dynamics



Among the department's many major experimental facilities is the 1 megawatt nuclear reactor, which is used extensively in both research and teaching activities.

DEGREES OFFERED

Engineering Mechanics (EM)
Nuclear Engineering (NE)
Engineering Physics (EP)
Nuclear Engineering and
Engineering Physics (NEEP)

RESEARCH CENTERS & FACILITIES

- ◆ Center for Plasma Theory and Computation
- ◆ Fusion Technology Institute
- ◆ Institute for Nuclear Energy Systems
- ◆ Materials Research Science and Engineering Center
- ◆ Materials Science Center
- ◆ Max Carbon Radiation Science Center/
1 MW TRIGA Type Nuclear Reactor
- ◆ Pegasus Plasma Experiment
- ◆ Wisconsin Shock Tube
- ◆ Wisconsin Materials Institute



INDICATORS OF QUALITY

NAMED
PROFESSORSHIPS

6

NATIONAL ACADEMY
OF ENGINEERING

4

ACTIVE
PATENTS

36

AVERAGE ANNUAL
RESEARCH FUNDING

\$22.1M

**AVERAGE
YEARLY
SALARIES**

NE Undergrads:

\$62,000

EM MS Students:

\$78,326

NE MS Students:

\$78,100

EM Undergrads:

\$66,575

EM PhD Students:

\$99,643

NEEP PhD Students:

\$99,643

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.

MECHANICS OF MATERIALS

Emphasizes the study of force, stress, deformation, and motion as applied to engineering materials, structures, and fluids. Research includes shape memory alloys, nano-structured films, biomaterials, bone and soft tissue, geo-materials, space structures, viscoelastic liquids, and fiber-reinforced composites.

FINANCIAL AID

UG SCHOLARS

58

GRAD FELLOWS

12

MS / PhD

15

TAs

72

RAs



GRADUATES

(ACADEMIC YEAR 2018-19)

EM ▶ BS—50 MS—4 PhD—2

NE ▶ BS—22 MS—22 PhD—15

EP ▶ BS—6