NPRE 2017 Overview

Enrollment, Fall 2017
143 Undergraduates - NPRE
95 Graduate Students - NPRE
27 Graduate Students - Master of Engineering in Energy Systems

Degrees Granted
(August 2016-May 2017)
36 Bachelor of Science Degrees
18 Master of Science Degrees
14 Master of Engineering Degrees
7 Doctor of Philosophy Degrees

Student Support
(multiple support sources for some students)
47 Undergraduate Scholarships
15 Fellows
58 Research Assistants
20 Teaching Assistants

Faculty
14 FTE Faculty
(6 Assistant, 2 Associate, 6 Full Professors)
2 Positions Open
2 Endowed Professorships
1 Research Professor
8 Affiliate Faculty
12 Adjunct Faculty
4 Emeritus

Growth and Recognitions
The NPRE Department has hired nine faculty members since 2012. There are two open positions. Faculty members and graduate students in NPRE have been honored by many ANS and other national and international awards, several of these over the last five years.

Partial List of Awards
3 ANS MJ Oestmann Award (over 3 years)
3 ASEE Glenn Murphy Award
ANS Compton Award
ANS Outstanding Achievement Awards (Fusion Energy Div, Mat Sci & Tech Div)
ANS Radiation Sci and Tech Award
ANS Seaborg Medal
ANS Young Member Excellence Award
Atomic Energy Society of Japan Shorei-Sho Award
DOE Presidential Young Investigator Award
IEEE Nuclear & Plasma Sciences Award

Research Centers and Laboratories, and Initiatives
- Center for Plasma-Material Interactions
- Functional X-ray Imaging Lab (FXIL)
- Hybrid Illinois Device for Research and Applications - HIDRA (tokomak/stellarator)
- Multiphase Thermo-Fluid Dynamics Lab
- Non-Equilibrium Matter Lab
- Nuclear Materials Labs
- Radiation Surface Science and Engineering Lab
- North American Technical Center (NATC), Information System on Occupational Exposure (ISOE) (The other three such centers are in Vienna, Tokyo and Paris.)
- Industry-sponsored research for plasma-radiation-material interactions, and nuclear power

Instructional and Research Areas
Three paths for undergraduate concentration:
- Nuclear Power, Safety and Environment
- Plasma and Fusion Science
- Radiological, Medical and Instrument Applications

Graduate research is broadly classified in five areas:
- Nuclear Power (reactor physics, thermalhydraulics, fuel cycle, radiation transport, I&C)
- Plasma and Fusion (modeling, plasma-material interactions)
- Radiological Sciences (detectors, imaging, health physics, medical applications)
- Material Science (nuclear fuels, structural materials)
- Risk and Policy (PRA, safety, energy, arms controls, disarmament, security)

Research Funding
$6.2 million, FY 17 sponsored research expenditures (Up 24 percent from FY 16)
$10 million, new awards since August 2016
$150,000 (research-related gift expenditures)