NPRE 2019 Overview

Enrollment, Fall 2019
109 Undergraduates - NPRE
92 Graduate Students - NPRE
23 Graduate Students - Master of Engineering, Energy Systems

Degrees Granted
(August 2018-May 2019)
30 Bachelor of Science Degrees
13 Master of Science Degrees
19 Master of Engineering Degrees
9 Doctor of Philosophy Degrees

Graduate Student Support
60 Research Assistants
6 Teaching Assistants
13 Combined RA/TA/Departmental Fellowships
9 DOE–1, NSF–2, NRC–5, NASA–1 (and other prestigious national fellowships)
1 International Fellowship

Faculty
13 FTE Faculty
(4 Assistant, 4 Associate, 5 Full Professors)
3 Open Tenure-track Positions
2 Endowed Professorships
1 Research Professor
21 Affiliate, adjunct faculty
3 Emeritus

Recent Industrial Partnerships
ASML
LytEN
DuPont
POSCO
General Fusion
LAM Research
General Motors
Tokamak Energy
Exelon Corporation
Lockheed Martin
Starfire Industries, LLC
Tokyo Electron Ltd.

Recent National Awards
10 ANS/IEEE/APS/AVS/SPIE Fellows
11 ANS Mark Mills Award (3 in last 5 years)

Research Centers and Laboratories, and Initiatives
• Center for Plasma-Material Interactions
• Computational Plasma Physics Lab
• Functional X-ray Imaging Lab (FXIL)
• HIDRA (tokomak/stellarator)
• High Temperature Corrosion Lab
• High Temperature Nuclear Materials Lab
• Magnetron Sputtering Lab
• Multiphase Thermo-Fluid Dynamics Lab
• Neutron Metrology Lab
• Radiation Detection & Imaging Lab

• Radiological Instrumentation Lab
• Radiation Surface Science and Engineering Lab
• Socio-Technical Risk Analysis (SoTeRiA) Lab
• Soft Robotics & Artificial Intelligence Lab
• Virtual Education and Research Lab
• Micro and Nanotechnology Lab
• Seitz Materials Research Lab
• Beckman Institute for Adv Sci & Tech
• Blue Waters Sustained Petascale Computing

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)