



University
of Idaho

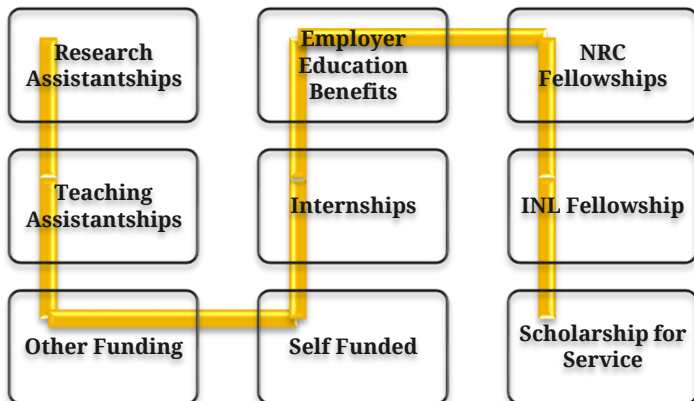
NUCLEAR ENGINEERING & RELATED PROGRAMS 2018

nuclear@uidaho.edu



2017-18

- Students Enrolled in Courses – 80
- Students in Degree Programs – 56



College of Engineering

Nuclear Engineering – M.S., M.Engr., Ph.D.
Mechanical Engineering - M.S., M.Engr., Ph.D.
Chemical Engineering – M.S., M.Engr., Ph.D.
Computer Science – M.S., Ph.D.
Electrical Engineering – M.S., Ph.D.
Materials Science & Engr. – M.S., Ph.D.
Nuclear Criticality Safety certificate
Critical Infrastructure Resilience certificate

Faculty & Research Areas

Rich Christensen – Director – design, fabrication & testing of heat exchangers for advanced reactors, single & two phase flow, heat transfer

Dave Arcilesi – thermal hydraulics, heat transfer, scaling analyses, experiments

Bob Borrelli – safeguards-by-design, fuel cycle analysis, modeling, scientific computing, risk assessment, nuclear hybrid energy system design, fuel cask design & analysis, nuclear system data analytics

Indrajit Charit – nuclear materials, radiation effects, high temperature materials, microstructure-properties correlations

Samrat Choudhury - structural nuclear materials, nuclear fuels, machine learning, multi-scale modeling of materials

Michael Haney – human-cyber-physical systems (industrial control protocols, digital instrumentation & control), cybersecurity for nuclear, power & water systems, computer & network security, digital forensics, active defenses, critical infrastructure resilience

Bob Hiromoto – parallel algorithms, communication protocols for UAV's, secure wireless networks

Mike McKellar - nuclear hybrid energy, heat exchangers, process modeling

Lee Ostrom – Associate Dean College of Engineering - risk assessment, nuclear safety, project management, industrial ergonomics

You Qiang – nanomaterials & nanotechnology for nuclear energy magnetism separation for spent nuclear fuel recycling, neutron radiation detection & instrumentation, radiation shielding

Krishnan Raja – degradation of nuclear structural materials, non-destructive materials evaluation & electrochemistry of molten salt reprocessing

Dakota Roberson – renewable energy integration, power system control, estimation & detection

John Russell – energy policy, cybersecurity, big data & analytics

Bob Smith – nuclear waste management, subsurface science

Vivek Utgikar – hydrogen and energy systems, advanced fuel cycles, energy storage

Haiyan Zhao – molten salt reactors, TRISO fuels for advanced gas reactors, nuclear waste reprocessing & recycling, advanced characterization, catalysis in petroleum, biofuels, natural gas

AFFILIATED RESEARCH FACILITIES

Center for Advanced Energy Studies
caesenergy.org

Idaho National Laboratory
inl.gov

Center for Space Nuclear Research
csnr.usra.edu

A few highlights:

- 1954 - UI 1st Education Contract with INL (then NRTS). Has been renewed each year thereafter.
- 2005 – DOE designates INL as lead nuclear national lab.
- 2009 – CAES building opened, UI is a leader in the growth and development of the CAES collaborative programs.
- 2014 – UI received NRC faculty development grant
- 2016 – UI awarded NRC Fellowships to support 2 masters students per year
- 2016 – Standard core of courses implemented.

Contact Information

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