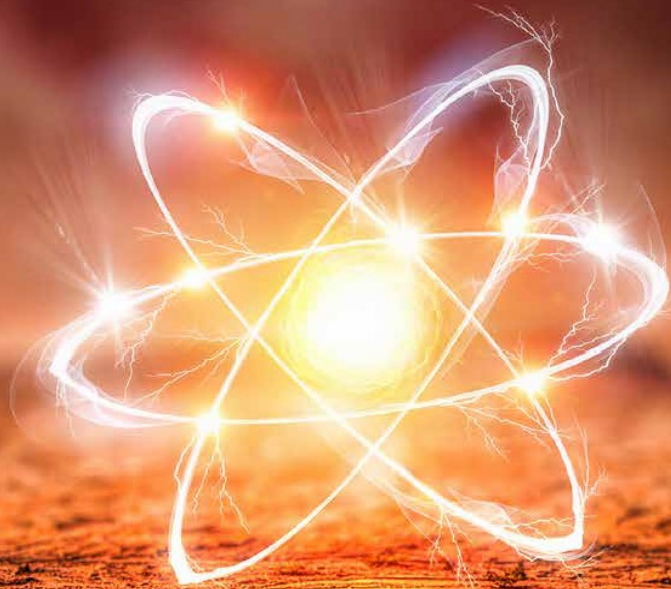


Introduction to **NUCLEAR ENGINEERING**



Dr. Alireza Haghighat
Robert E. Jr., Endowed Professor & Director



Year	Degrees
2011	NE Graduate Certificate
2014	PhD, MS & MENG in NE
2017	Accelerated MENG in NE for the US Naval Academy midshipmen
2019	NSTP graduate Certificate in collaboration with STS & SPIA
2019	Undergraduate Minor in NE
2022	On-line MENG in NE

Campus

Blacksburg

Greater Washington DC Metro Area

Program Focus

- Address application of Nuclear Science and Engineering to:

Power, Security, Medicine and Policy

- Subject areas include:

- Particle Transport Methods & Codes and their application to power, security and medicine (Alireza Haghghat, Luka Snoj)
- Nuclear Materials & Fuel (experimental & theoretical) (Jinsuo Zhang & Amanda Leong)
- Nuclear Fuel Cycle (Jinsuo Zhang)
- Thermal-Hydraulics & Reactor Safety (experimental & modeling) (Yang Liu)
- Radiation detection & Detector design (David Freeman & Alireza Haghghat, Jon Link, Luka Snoj, Mark Pierson)
- Nuclear nonproliferation and policy (Sonja Schmid, Mark Pierson & Alireza Haghghat)

Core Faculty

David Freeman (Collegiate Associate Professor), Alireza Haghighat (Professor and Director), Amanda Leong (Research Assistant Professor), Yang Liu (Associate Professor), Jinsuo Zhang (Professor) Mark Pierson (retired, teaching on-line courses)

Staff

Allison Jones (Coordinator) (Northern VA)
Alida Spaulding (Blacksburg)

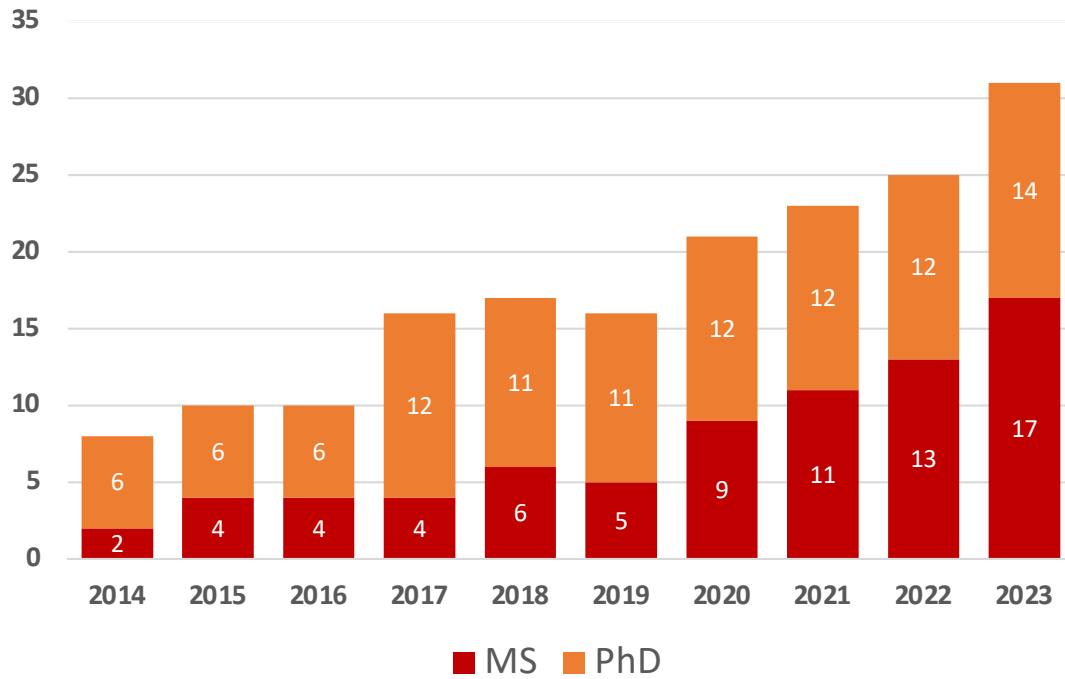
Affiliate/Adjunct* Faculty

(CS, ISE, ME, MSE, Physics/ JSI, LANL, Newport News shipbuilding)

David Bai, Michael Benson, Magda Carro*, David Clark, Celine Hin, Patrick Huber, Nathan Lau, Jon Link, Roop Mahajan, Ranga Pitchumani, Patrick Roberts, Sonja Schmid, Luka Snoj*, Danesh Tafti, James Turso*, Bruce Vogelaar, Michael von Spakovsky

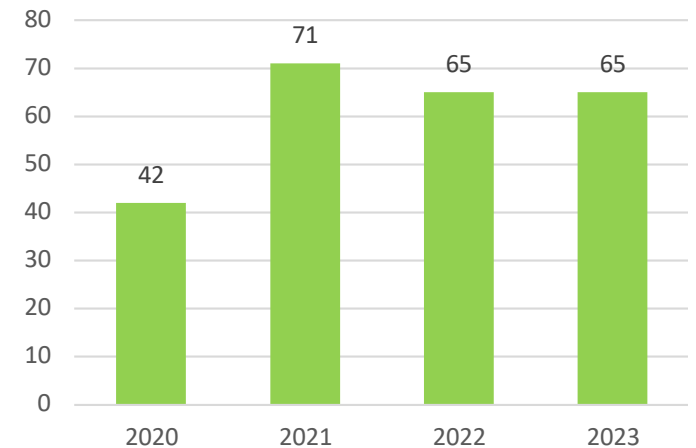
Enrollment

Graduate Students



Undergraduate Minor in NE

- Established: 2019
- No. of disciplines: 14



Degrees Awarded

Degrees	NE	Non-NE (ECE,ME,MSE, ESM)	Total
UG Minor	22		22
GC	74		74
PhD, MS & MENG	26*	35	61
Total	122		157

***Highly qualified & sought for graduates:**

Employed by **Universities** (Penn State, UNLV, U. of Utah, U. of Wisconsin), **National Labs** (ANL, LANL, INL, ORNL), **Government agencies** (NRC, CIA), **industry** (Westinghouse, Duke energy, DAI)