

# Certificates in Nuclear Engineering Blacksburg and Northern Virginia



Enhance your  
knowledge of  
nuclear science  
and engineering

## CERTIFICATE OPTIONS

- \* Graduate Certificate in Nuclear Engineering
- \* Graduate Certificate in Nuclear Science, Technology, and Policy

## CONTACTS

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Visit us at  
[nuclear.ncr.vt.edu](http://nuclear.ncr.vt.edu)





Courses  
available  
online



## Nuclear Engineering Certificate

Prerequisite training: BS degree or higher in engineering or science

This certificate provides a purposeful, cohesive set of technical electives in nuclear engineering. Students will gain a competitive edge for engineering positions in the nuclear industry.

### Curriculum

9 total credit hours (3 courses)

Required course:  
NSEG 5114, Nuclear Engineering Fundamentals  
(3 credit hours)

Elective courses:  
6 additional credit hours in NSEG

## Nuclear Science, Technology, and Policy Certificate

Prerequisite training: BS degree or higher in a technical or policy discipline

This certificate is a collaboration between the Nuclear Engineering Program; Department of Science, Technology and Society; and the School for Public and International Affairs. Students will integrate coursework in nuclear science and technology with policy and management and use this knowledge to address topics in safety, security, and non-proliferation.

### Curriculum

12 total credit hours (4 courses)

Required courses:  
STS/SPIA/NSEG 5284, Nuclear Nonproliferation, Safeguards, and Security (3 credit hours)

GRAD 5134, Capstone Course (3 credit hours)

Elective courses:

6 additional credit hours in related topics of the student's choosing. Courses must be approved by the student's advisor. Examples include:

NSEG 5124, Nuclear Reactor Analysis

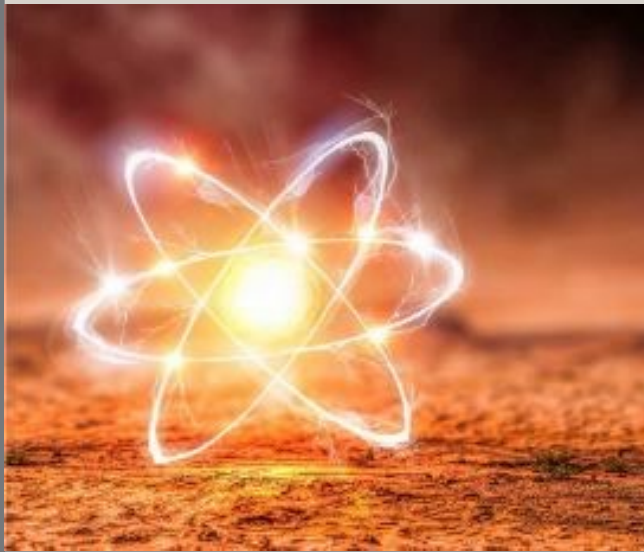
NSEG 5214, Nuclear Power Plant Operations and Systems

PAPA 5254, Homeland Security and the Terrorist Threat

PAPA 6254 Critical Infrastructure Protection and Resiliency

GIA 5514, Global Security

GIA 5664, Energy and Environmental Security



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