# Nuclear Engineering Curriculum

**2020-2021**

## Core

Students who do not have a background in Nuclear reactor theory are also required to take NE 410/510 Nuclear Reactor Theory. Other leveling course work may be required. Must have a B or better to satisfy pre-req.

- NE 501 Seminar
- NE 511 Advanced Nuclear Reactor Theory
- NE 520 Radiation Interactions and Transport
- NE 524 Interaction of Rad. w/Matter
- NE 541 Nuclear Reactor Theory
- NE 564 Thermal-Hydraulic of Nuclear Systems
- NE 571 Radiation Damage in Materials

**Pick two from the following**

## NE Elective Courses

Elective courses to meet coursework hours (Plan I 30 hrs, Plan II 33 hrs, & Plan III 30 hrs)

- NE 485 Fusion Technology
- NE 515 Special Topics
- NE 513L Grad Nuclear Engineering
- NE 523L Environmental Measurements Laboratory
- NE 527 Radiation Biology for Engineers & Scientists
- NE 528 External Radiation Dosimetry
- NE 529 Internal Radiation Dosimetry
- NE 539 Radioactive Waste Management
- NE 562 Monte Carlo Techniques for...
- NE 568 Introduction to...
- NE 610 Advanced Methods in Radiation Transport
- NE 515 Special Topics

*Plan I will required 6 hrs of Thesis & Plan II will require 6 hours of practicum. Additional graduate electives can be taken from MATH, PHYC, CHEM, CS, CBE, ME & other approved STEM fields.