

Nuclear Engineering Qualifying Exam (NEQE) Policy

Exam Offerings for the 2025-2026 Academic Year:

Fall: Thursday, August 14, 2025

Spring: Friday, January 16, 2026

Location: FEC 1240

Exam Overview:

The NEQE (informally known as the “quals”) is taken by graduate students who intend to continue to their PhD in Nuclear Engineering. It is a one-day written examination covering the fundamentals of nuclear engineering.

This exam consists of two 4-hour sessions. **The first part of the exam is from 8:00 a.m. to 12:00 p.m. and the second is from 1:00 p.m. to 5:00 p.m.** Students may select four courses on which to be examined from the approved course list on page 2 of this document. As such, at least those four courses should have been completed at UNM. The NEQE may also contain an oral component as determined by the Committee on Studies based on results of the written examination.

Procedure for scheduling the exam:

The following procedure should be completed no later than June 1st for fall and no later than December 1st for spring. Please meet these deadlines. Please complete the following procedure in this order:

1. Students should meet with their Research Advisor to discuss and agree on the four courses on which to be examined. Note that only certain NE 515 courses may be used. Bring a copy of the **NEQE Proposal Form** to this meeting. Both you and your Research Advisor will complete this form together.
2. Students will then email the Nuclear Engineering Graduate Director to review the course choices and make the final approvals to these forms. Please copy a staff academic advisor on your email.

Important: under no circumstances should the student contact or approach professors other than their Research Advisor or the Graduate Director regarding the exam.

Nuclear Engineering Qualifying Exam (NEQE) Proposal Form

Name: _____ Date: _____

Research Advisor: _____

Please Circle Exam Semester/Year:

Fall 2024

Spring 2025

Select four courses on which you would like to be examined from the list below:

- ☐ NE 410/510 Nuclear Reactor Theory
- ☐ NE 462/562 Monte Carlo Techniques for Nuclear Systems
- ☐ NE 485 Fusion Technology
- ☐ NE 511 Advanced Nuclear Reactor Theory
- ☐ *NE 515 Special Topics (list specific course below)
- ☐ NE 520 Radiation Interactions and Transport
- ☐ NE 524 Interactions of Radiation with Matter
- ☐ NE 525 Methods Analysis in NE
- ☐ NE 528 External Dosimetry

- ☐ NE 529 Internal Dosimetry
- ☐ NE 534 Plasma Physics
- ☐ NE 439/539 Radioactive Waste Mgt.
- ☐ NE 560 Nuclear Reactor Kinetics
- ☐ NE 464/564 Thermal-Hydraulic Nuclear Systems
- ☐ NE 468/568 Intro Space Nuclear Power
- ☐ NE 570 Nuclear Fuel and Materials
- ☐ NE 571 Radiation Damage in Materials
- ☐ NE 610 Advanced Nuclear Reactor Theory

List name of class and instructor below:

*NE 515- list specific courses you plan to use (NE 515 courses must be approved by the Graduate Director): _____

Proposed Courses Approved:

Signature, Graduate Director

Date