Nuclear Engineering Comprehensive Exam (NECE) Policy

Exam Offerings for the 2021-2022 Academic Year:

Fall: Thursday, August 19, 2021
Spring: Friday, January 14, 2022

Location: TBD

PLEASE COMPLETE THE ELECTRONIC REPORT OF EXAM FORM 10 BUSINESS DAYS PRIOR TO EXAM DAY.

Exam Overview:

The NECE (informally known as the “comps”) is taken by post-Masters students who have completed their doctoral course work and intend to advance to candidacy for the 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 pg. 2 of this document. The NECE may also contain an oral component as determined by the Committee on Studies based on results of the written examination.

If you are intending to advance to candidacy in either fall or spring you must have the following items completed in the semester in which you intend to advance: 1) your Announcement of Examination Form; 2) your NECE passed and confirmed by your committee’s completion of the Report of Exam Form; 3) your Advancement to Candidacy Form completed then approved by the Office of Graduate Studies (OGS). Instructions for completing your Advancement to Candidacy and Appointment of Dissertation Forms can be found by visiting the OGS website http://grad.unm.edu/degree-completion/graduation-requirements/phd.html.

Procedure for scheduling the exam:

The following procedure should be completed no later than July 30th, 2020 for fall advancement and no later than November 30th, 2020 for spring advancement. Please meet these deadlines. OGS policy states that the Announcement of Examination Form must be submitted to OGS at least two weeks prior to the date of the examination. 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 NE515 courses may be used. Bring a copy of the NECE Proposal Form to this meeting. Both you and your Research Advisor will complete this form together. The Announcement of Exam form is electronic and is completed by the student online.

2. Students will then schedule a meeting with the Nuclear Engineering Graduate Advisor to review the course choices, the committee selected, and make the final approvals to these forms. On the Announcement of Examination Form, complete as much information as you know before you meet with the Graduate Advisor. When asked for information about your examination committee, the Graduate Advisor as Chair will tell you the NECE committee, which is not the list of professors for the courses. The Graduate Advisor will then make the final approvals and forward these forms to the Program Coordinator for processing with OGS.

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

*NE 515- list specific courses you plan to use: _________________________________

List name of class and instructor below:

Proposed Courses Approved:

Signature, Graduate Advisor                 Date

Examination Committee

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