NE Graduate Handbook Overview: Break-out Room Session

August 21, 2023 | University of Florida

UF Herbert Wertheim College of Engineering
Department of Materials Science & Engineering
UNIVERSITY *of* FLORIDA

Graduate Handbook & Graduate Catalog

- MSE/NE Graduate Handbooks contain all Academic and Departmental Guidelines
  - 2023-2024 MSE and NE handbook available here:
    - https://mse.ufl.edu/academics/handbooks/
  - Graduate Catalog
    - https://catalog.ufl.edu/graduate/
  - We require all students to be informed of, and adhere to, all policies stated in the Graduate Handbook and Graduate Catalog.

Curriculum Overview

Table I. Summary of the graduate degree requirements.

SCH (Semester Credits Hours) Requirements	Master (Thesis)	Master (Non-thesis)	Doctor of Philosophy
Total SCH	30[a]	30[a]	90[a,b]
NE Core Requirements	7	7	>12[c]
Graded 5000+ Credits	≥18	≥18	N/A
ENU Graded 5000+ Credits	≥12	≥12	≥15
Professional Development	N/A	N/A	6
Research/Special Project	≤6	≤6	variable
Supervisory committee members (minimum number)	3	1[d]	4
Qualifying Exam	None	None	Yes
Final Exam	Oral defense and written thesis	Written[e]	Oral defense and written thesis
Time limit for completing degree	7 years	7 years	5 years[e]

[a] Beyond B.S.
[b] May include credit hours from Master's program
[c] Core course credits used for written portion of candidacy exam.
[d] Supervisory Chair only

Degree Requirements from Grad School

- Final term registration – Credits MUST count towards degree
  - 3 credits in Fall or Spring
  - 2 credits in Summer
  - Students on assistantship or fellowship must register according to their funding requirements, even in final term.
- Valid Final Exam milestones entered (entered by Academic Services Office, recorded using electronic forms)
  - Deadlines are posted by UF Editorial Office every academic year
- Grades of C- or lower do not earn credit from the UF Graduate School

Additional Degree Requirements from Department

- Completion of Nuclear Engineering Core Courses (MS Thesis and Non-Thesis Only)
  - ENU 6051 (Radiation Interaction Basics and Applications I) – 3 credits
  - ENU 5615C (Nuclear Radiation Detection and Instrumentation) – 4 credits
- PhD Core (4 Courses) Courses will be selected by the student and their advisor
  - NE core courses are a requirement for the written portion of the qualifying exam.
  - Students select 4 courses from the list of approve graduate courses.
  - Must be declared prior to the completion of third course and before registering for the fourth.
  - Courses must be completed by the end of their second year in the program.
  - Students must earn a cumulative GPA of 3.3 or higher and no course grade less than B (1 attempt per course).

Professional Development (Ph.D. Only)

- Required 6 Credits of Professional Development
  - 1 Credit ENU 6941: Professional Development for Nuclear Engineering
  - 1 Credit EGS 6056: Learning and Teaching in Engineering
  - 4 Credits ENU 6940: Supervised Teaching
- For students who can't TA due to fellowship requirements or has no interest in teaching.
  - Up to 5 credit (waivers) of Student Arranged Activities (Activities and waivers are summarized in graduate handbook).
  - Waivers are not automatically granted.
  - Arranged activities should not directly advance the students Ph.D. research.

Required Degree Coursework

- Please review section 3 of the NE Graduate Handbook
  - First semester registration
  - Number of courses required within the major
  - Allowable amount of research credits
  - Any research requirements
- Pages 6-10
  - Not all pages are relevant for every degree track
    - MS Non-thesis vs. MS Thesis vs. PhD

MS *Non-Thesis* Final Exam

- MS Final Exam is a written assignment
  - Graded by the project advisor.
    - Dr. Watson (default) or other faculty you wish to elect as advisor
- PhD students earning an MS degree have written assignments graded by their faculty advisor
- Written assignment requirements are decided by the individual that is grading it (pass/fail)
  - General idea is to show you have grasped an understanding of your studies at the graduate level
- Again, you cannot graduate without a final exam, and there is a strict deadline!

MS *Thesis* and Final Exam

- A Nuclear Engineering MS degree with a required research and thesis component
  - Must register for ENU6971 (Master's Thesis Research) in final term of degree
  - Student must write a thesis that is approved by committee (more on this in a couple slides)
- Final Exam is an oral defense of thesis
  - During the final exam, the student will present their thesis research; any further requirements for this presentation will be set by their advisor

PhD Milestones (more than one!)

Degree Timeline and Deadlines

The following illustrates a typical timeline to the PhD degree

Time	Milestone	Completed
1st semester	Select PhD Advisor, Complete 2 core courses	☐
2nd semester	Submit Core Course Declaration Form, Complete remaining 2 core courses, Select supervisory committee	☐
4th semester	Prepare for qualifying examination, Complete 5th core course (if needed)	☐
5th semester	Pass graduate qualifying examination/admission to candidacy	☐
Annually after qualifying exam	Annual research update with supervisory committee	☐
Within 6 months of defense	Sufficiency meeting with supervisory committee	☐
4th-5th year	PhD dissertation defense	☐

In addition to completion of their dissertation research, core courses , and credit hour requirements, students who entered the PhD program in Fall 2018 or later are required to complete Professional Development activities equivalent to 6 credits (approximately 300 hours).

All PhD students are required to complete a yearly Individual Development Plan (IDP).

All academic and departmental guidelines can be found in the Graduate Student Handbook.

Research Advisor and Supervisory Committee

- PhD
  - Comprises at least four members selected from Graduate Faculty
    - At least one member must serve as an external faculty member, with no affiliation to MSE
- Master's Thesis
  - Comprises at least three members selected from Graduate Faculty
    - The committee consists of the research advisor, one additional internal member, and one external member
- Non-Thesis Master's
  - The Graduate Coordinator is designated as the Graduate Committee Chair

Registration

- Review policies in Graduate Handbook, **especially** in concern with final semester registration requirements, committee requirements, and examinations.
- It's your responsibility to adhere to registration requirements, especially as it pertains to funding:
  - Students on assistantships:
    - 9 credit registration in the Fall/Spring, 6 credit registration in the Summer
  - Students on fellowships:
    - 12 credit registration in the Fall/Spring, 8 credit registration in the Summer

Seminar Requirement

- Students must complete the following course in a semester prior to that in which they defend their dissertation:
  - ENU 6935 (Nuclear and Radiological Engineering Seminar) – 1 credit
- Most MS students will not need to take Seminar, but are welcome to
- PhD students may have several semesters of 8 credits of research and 1 credit of Seminar for a total of 9 credits (full time)
  - Certain funding options have different requirements – We will help monitor this for you

Different kinds of research – this is tricky

- If you are a PhD student – ENU7979 and ENU7980
  - 7979 before qualifying exam
  - 7980 after qualifying exam
- MS students cannot register for 7000-level research. Volunteer research for credit is ENU6910, research for no credit is EGN6913
- Rule of thumb: 6000-level = MS, 7000-level = PhD

Never be afraid to ask!

- It is our job to answer these questions. We WANT to help… Because any mistakes cause more work for us as well.
- There's no such thing as a bad question. Ever.
- Our office is always open* and you are welcome to stop by anytime
  - *when campus is open

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