MSE Graduate Handbook Overview: Break-out Room Session

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

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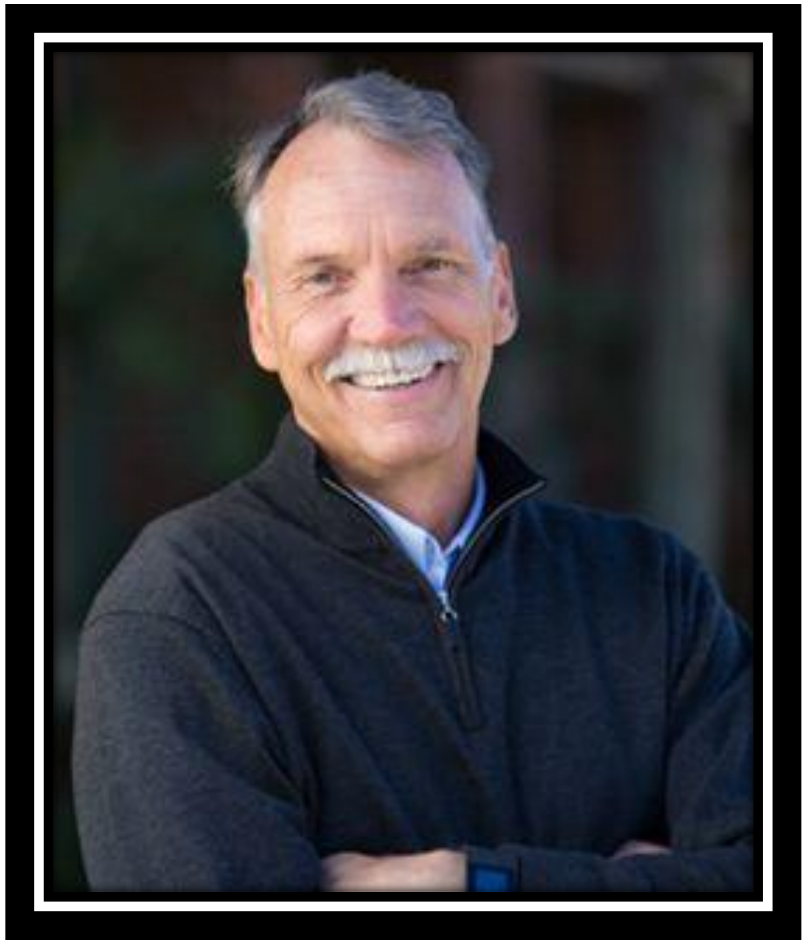

Graduate Handbook Review

Kevin Jones, PhD

Graduate Handbook

- https://mse.ufl.edu/academics/handbooks/

Curriculum Overview

Semester Credit Hours (SCH) Requirement	Master (Thesis)	Master (Non-Thesis)	Doctor of Philosophy
Total SCH	30[a]	30[a]	30[a,b]
MSE Core Requirements	12	12	13
MSE Electives	≥6	≥6	≥6
Specialization Electives[c]	≤9	≤9	Variable
Supervised Teaching	N/A	N/A	4
Research/Special Project	≤5	0	Variable
Supervisory Committee Member (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[f]

[a] Beyond B.S.
[b] May include credit hours from Master's program
[c] Graduate level coursework outside of MSE approved by Graduate Coordinator
[d] Supervisory Chair only
[e] Technical paper graded by Graduate Coordinator
[f] From admission to Ph.D. Candidacy, passing Qualifying Exam

Core Courses

Fundamental Core Courses (Required)

- EMA 6316: Materials Thermodynamics (Fall)
- EMA 6136: Diffusion, Kinetics, and Transport (Spring)

Applications Core (2 Required)*

- EMA 6313: Materials Structure and Mechanical Properties (Fall)
- EMA 6580: Science of Biomaterials (Fall)
- EMA 6165: Polymer Physics (Fall)
- EMA 6114: Functional Properties of Materials (Spring)
- EMA 6581: Polymeric Biomaterials (Spring)
- EMA 6667: Polymer Processing (Spring)

**remaining courses not selected as Core can be used as electives*

Passing Grades

- For MS students, a passing grade is C (C- is failing)
- For PhD students, a passing grade is B (B- is failing)

- All students must maintain an overall GPA or 3.0 or better

Common Curriculum

- A minimum of 6 credits of MSE elective graduate level-5000/6000 courses are taken based upon a student's specific interests and committee requirements for minor studies.
- A maximum of 6 credits of 3000-4999 (undergraduate level) coursework may count towards the Graduate Degree. This coursework must be taken outside of the major and can't have a graduate level equivalent. In addition, registration must be approved by the Graduate Coordinator. As its coursework taken outside of the major, it will count towards the 9-credit maximum of non-MSE coursework.
- Full-time Graduate students in our department (EDGE students excluded) are required to register for "EMA6936: Seminar in Materials Science and Engineering" (1 credit) each semester, unless a student has registered for 9 credits of graded courses in that semester, or is an EDGE student, or in the final semester before graduation and has received a waiver from the Academic Services Office.

Typical First Semester Registration (9 credits)

1: EMA 6316 Thermodynamics for 3 credits

2: One (1) Application Core course for 3 credits

3: EMA 6001 or another 3-credit class*

- Materials students are recommended to either complete placement test or take EMA 6001 or discuss with advisor before taking EMA 6313: Materials Structure and Mechanical Properties

***Or**

Two (2) credits of research (must have research advisor) + One (1) credit of seminar (EMA 6936)

Research Advisor and Supervisory Committee

- PhD
  - Comprises at least four members selected from Graduate Faculty
    - At least three members, including the chair, must be MSE Faculty or Affiliate 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 and two additional faculty members, all of whom need to be Graduate Faculty in MSE
- Non-Thesis Master's
  - The Graduate Coordinator is designated as the Graduate Studies Chair. There is no committee.

PhD Specific Requirements

- Requires 90 credits of course work.
- Four core courses (12 credits)
- EMA 6920 Professional Development (1 credit)
- EMA 6941 Supervised Teaching (4 credits)
- Individual Development Plan (IDP) via Canvas E-Learning Annually
  - Seven (7) Annual Fall Assignments due by December 1st
    - Schedule Mentor Advising Meeting, Action Plan, Mentoring Plan, Short Term Goals Check-in, Self Assessment Survey, Aspirations/Goals/Responsibilities, Mentor Meeting Form
  - One (1) Annual Spring Assignment due by end of Spring Semester
    - Long Term Goals Check-in

PhD Specific Requirements Cont.

Time	Milestone
Annually	• Complete your yearly Individual Development Plan (IDP)
First (1st) Semester	• Select PhD Advisor • Complete 2 core courses with B or better: EMA 6316 & declared Core Applications course
Second (2nd) Semester	• Submit Core Course Declaration Form • Complete remaining 2 core courses with B or better: EMA 6136 & declared Core Applications course • Establish Ph.D. supervisory committee and submit Appointment of Supervisory Committee Form
Fourth (4th) Semester	• Complete EMA 6920 with S (1 credit) • Complete any remaining Materials Fundamentals Core or Materials Applications courses (B or better) *if needed* • Complete EMA 6941 (2 credits) with S
Fifth (5th) Semester	• Pass graduate qualifying examination / admission to candidacy • Complete EMA 6941 (2 credits) with S
Annually after qualifying exam	• Annual research update with supervisory committee
Within 6 months of defense	• Sufficiency meeting with supervisory committee • Meet with the Academic Services Office (ASO) to discuss defense requirements and deadlines
Fourth (4th) – Fifth (5th) year	• PhD dissertation defense

Final Semester Registration

- During the final semester, the student must be registered for at least 3 credits in fall or spring and 2 credits in the summer in the following courses for each degree option:
  - Master's Non-Thesis students must enroll in course work that counts toward the graduate degree
  - Master's Thesis students must enroll in EMA 6971
  - Doctoral students must enroll in EMA 7980.
- This minimum final semester registration is applicable to all graduate students. The Graduate School will not accept petitions to this policy. Note that graduate assistants may be required to register for more credits and should see their letter of appointment for guidance.

Self-Assessment Exam Overview

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MSE Self-Assessment Exam

- The diagnostic examination emailed to Material Science students over the summer is used in order to help you select the appropriate registration for the Fall semester.
- The examination is to help you identify your knowledge of Materials Science and Engineering.
- It is a graded examination but will not be recorded on your transcript.
- If you score less than 75% on the test, we recommend you register for EMA 6001 – (graduate level)
- EMA 6001 is considered a technical elective which counts towards your degree.
- If you are interested in EMA 6313 – Structure and Mechanical Properties of Materials, we recommend scoring 75% or higher OR taking EMA 6001 prior to enrolling in EMA 6313
- The examination will consist of 55 questions based on Introduction to Materials Science & Engineering texts, e.g., by William D. Callister.
- If you have not completed the exam, we recommend completing before the last day of drop/add, August 27th. *Note registrations completed after the 20th may incur $100 late fees*

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