

Materials Science & Engineering

Graduate Handbook
2011-2012

Last Updated: 04/25/12

1. Introduction

The Department of Materials Science & Engineering (MSE) offers graduate students the opportunity to conduct state-of-the-art research under the supervision of world-class faculty while pursuing Master of Science or Doctor of Philosophy degrees in the discipline. The UF Graduate Catalog is the University of Florida's official record of graduate policies, critical dates, deadlines, course descriptions and faculty members for master's degree and doctoral degree students. It is the student's responsibility to know and understand these rules. The graduate school catalog may be found at this link: <http://gradschool.ufl.edu/students/catalog.html>. This handbook is provided to MSE graduate students to serve as a companion resource to the University of Florida Graduate Catalog.

2. Department Administration

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3. Advising/Registration

The responsibility of every student's curriculum planning will rest on the student and his/her advisor/supervisor. If you have not joined a faculty member's group, then you will see Dr. John J. Mecholsky, Jr. (237 Rhines Hall) for advisement.

- Prior to each semester a registration hold will be placed on your records
- Please refer to www.isis.ufl.edu and review your hold screen to check for additional holds to your record which will prevent registration
- You must seek permission to register from your advisor either in person or electronically, this will enable the Academic Services Office (ASO) to lift your registration hold
 - In person – Download the form by following the directions below:
 - Go to MSE Website: www.mse.ufl.edu
 - Click on Students in the menu bar
 - Click on Forms in the left-hand column (aka **Student-Forms** page on the MSE website)
 - Click on Academic Advisement Form under Graduate Student Registration
 - Fill out advisement form and take to advisor/supervisor for signature
 - Bring completed advisement form to ASO for permission to register

- Electronically – Online Advisement Form
 - This form is available from the 1st day of advanced registration through the last day of classes the previous term
 - Go to MSE Website: www.mse.ufl.edu
 - Click on Students in the menu bar
 - Click on Forms in the left-hand column (aka **Student-Forms** page on the MSE website)
 - Click on Online Graduate Advising Form under General Forms
 - Click on your advisor/supervisor's name; (Mecholsky, John if you do not have an advisor)
 - ASO will email you directions within two business days from receiving an approval from your advisor
- After receiving permission to register, go to www.isis.ufl.edu
 - Go to Registration, Register Now in the left-hand column and click on the term (fall, spring, or summer) for which you are registering
 - Proceed to the registration screens
 - Click on Register by section number if applicable
 - Type in the section number provided by ASO and if applicable the number of credits
 - Confirm the course with your Gatorlink password
 - Repeat the steps above for the remainder of your registration
- Register on time to avoid unnecessary late fees. Registration and payment deadlines for each semester can be found at this link: <https://catalog.ufl.edu/ugrad/current/Pages/dates-and-deadlines.aspx>
- Some students on funding are required to pay non-matriculation fees each term
 - Fees for 2010-11 were \$66.31/credit hour for students who started fall 2010
- Pay your portion of fees by the fee payment deadline even if your tuition waiver has not been processed. This will insure you will not be assessed late payment fees. The ASO will not process petitions for late fee payments. In recent terms the Student Financial Affairs has deferred the portion

4. Funding/Employment

- Graduate Student Fellowship Award (GSFA) – must maintain enrollment of 9 credit hours in the fall and spring and 6 credit hours in the summer terms
- Graduate Research Assistant – the contract for UF Graduate Assistants United can be found at this link: <http://www.ufgau.org/gau%20docs/Contract.pdf>
- External Funding (NSF, DOE, GEM, etc.) – It is customary to provide ASO with award information for external funding
- College Achievement Award (CA) – out-of-state or international students, who are not on traditional funding, may be awarded partial financial support via the CA. The following rules apply:
 - No other funding: i. e., assistantship, fellowship, etc. may be held concurrently
 - Is good for a maximum of 30 credit hours within 1st two years of enrollment
 - Students pay a set rate per credit hour; this amount is provided in the original offer letter
 - May not hold OPS employment in the department in which you receive the CA
 - Must maintain a minimum 3.0 gpa in both the departmental and cumulative courses
 - Must notify ASO upon receipt of other funding (GRA, External, etc.)
- Other Personnel Services (OPS) – on-campus jobs through www.jobs.ufl.edu

- Must apply online through www.jobs.ufl.edu
- If receiving CA, OPS is allowed as long as it is not within the same department as receiving the CA award
- Volunteering – Graduate students may not volunteer to work in this department under any circumstances. Students must either be compensated for their work in a lab or be registered for research under the faculty member’s supervision.
- Internships – Students may register for internship credits under the following guidelines:
 - Must have permission from their supervisory committee chair or graduate coordinator if the student has no supervisory committee
 - Complete and submit the Request for internship form from the Students-Forms page and attach your offer letter from the company
 - ASO will review your form and notify you via email if the request is processed
 - If approved ASO will send information on how to register for EGN5949
 - If registered for EGN5949, the following forms should be submitted to ASO electronically no later than a week before classes end for the term registered in order to receive grade for that term. Links to these forms are on the Students-Forms webpage
 - EGN5949 Employer’s Student Evaluation Form
 - EGN5949 Student’s Evaluation of Employer
 - Curricular Practical Training (CPT) – For international students only, please refer to the University of Florida International Center for the CPT instructions and registration requirements: www.ufic.ufl.edu
 - Apply with ASO by following the Internship instructions above by the appropriate deadline
 - April 1 – summer CPT
 - July 1 – fall CPT
 - November 1 – spring CPT
- Payroll and Tax Information
 - Students on formal funding (assistantship, fellowship, etc.) should refer to the Tax Office for information on whether or not taxes will be taken out of their stipends: <http://www.fa.ufl.edu/tax/>
- Graduate Insurance
 - Students on appointments began receiving health care benefits beginning in the fall 2008 term, please refer to www.gatorgradcare.com for additional information
- If you obtain any type of funding (Graduate Research Assistantship (GRA), External Fellowship, etc.) after you arrive, please notify ASO
- Graduate students are required to keep a minimum 3.0 gpa both for their cumulative and departmental courses; failure to maintain the appropriate gpa may result in loss of funding

5. Academic Requirements

- Form Supervisory Committee no later than the end of your second semester of study or after 12 credit hours in order to be able to register for a third semester
 - Form is at the following link: <http://www.mse.ufl.edu/static/forms/supervisory-committee-form.pdf>
 - Form requires all original signatures of faculty members

- Transfer credits – graduate level courses from a Master’s degree from another university may be considered for transfer to count towards the MS or PhD degree with approval of your supervisory chair or the graduate coordinator. In addition the following must apply:
 - If student is pursuing a MS degree at UF, then up to nine (9) credits may be requested
 - If student is pursuing a PhD at UF, then up to 30 credits may be requested
 - All work transferred must be coursework taken with a grade of B or better
 - Student must submit a Transfer of Credit review by sending an email to advising@mse.ufl.edu
- Progression to Graduation – Every student is expected to make satisfactory progress toward graduation each semester. Students who fail to make satisfactory progress may be required to seek advisement, mandated to meet specific conditions in order to continue in the major, or denied further registration in the department.
 - Additional Progression Standards which all MSE students must meet:
 - Maintain a grade point average of 3.0 or higher both cumulatively and within departmental courses
 - Probation: students who fail to maintain the minimum 3.0 in either the cumulative or departmental courses are placed on Academic Probation and may need to petition to maintain funding
 - Must sign a probation contract with ASO by the first business day of the next term
 - May request a one-time petition only to maintain funding (GSFA, GRA, CA, etc.); this will only be processed if a current probation contract is in place

PhD

- Required Credit Hours: 90 beyond the bachelor’s degree
 - Required: 18 hours EMA5000-6000 level (base-count hours) courses with a minimum grade of C or better
 - Coursework is decided between the student and advisor
 - Additional options for courses which are relative to the PhD degree
 - Maximum 9 credit hours of coursework outside the Department; of these 3 credits may be an undergraduate course at a 3000-4999 level
 - Maximum 8 credit of EMA6905 – Individual Work
 - Maximum 5 credits of EMA6910 – Supervised Research
 - Supervisory Committee – Rules for the MSE Supervisory Committee are as follows:
 - Must be formed by the end of the 2nd semester or completion of 12 credits
 - To form the committee, students must submit a completed Supervisory Committee Form with signatures from all faculty, the form may be found on the **Students-Forms** page of the MSE website www.mse.ufl.edu
 - Committee consists of 5 members who hold graduate faculty status with the Graduate School
 - 4 Internal MSE members
 - Chair
 - 3 additional MSE graduate faculty
 - 1 External member; this individual cannot hold MSE graduate faculty status
 - **Ph.D. track students will have to achieve two separate requirements (one academic, one research potential) as described below in order to be admitted to Ph.D. candidacy.**
- I. **ACADEMIC REQUIREMENT:**
- **All PhD track students must take 4 core classes: AMP1, AMP2, Thermo, Kinetics.**

- Students must obtain a minimum grade of B or better on the core courses. Students cannot take any core course more than twice in order to achieve this requirement.
- All PhD track students must take 1 specialty (EMA 6XXX).
- Students must obtain a minimum grade of B or better on the specialty course. Students cannot repeat any specialty course.
- Students have a maximum of two years from the entry to the graduate program to achieve this academic component requirement (i.e. two Fall and two Spring semesters).
- Under special circumstances, students identified during the recruiting process and/or first semester registration, may petition to delay enrollment in these courses in order to remedy deficiencies in their undergraduate preparation or any other course load limitation (e.g. off-campus students). An approved plan of study (by ASO, the graduate coordinator and the advisor championing the student) must be in place (petitioned and approved) before drop/add in the beginning of the first semester.

II. RESEARCH POTENTIAL REQUIREMENT:

- The students must defend orally a written Ph.D. research proposal.
- A Ph.D. supervisory committee must be in place to present/defend the research proposal.
- Examination will be graded pass/fail.
- Students have a maximum of two attempts to defend the Ph.D. research proposal.
- The students have a maximum of two years from the entry to the graduate program to achieve this research potential requirement
 - Online announcement must be submitted to ASO at least one week prior to the defense by following the directions below:
 - Go to the Students-Forms page on the www.mse.ufl.edu website
 - Click on Admission to Candidacy in the Supervisory Committees/Defenses section, the form is self-explanatory
 - If you have any internal substitutes (maximum of 2), then indicate the substitution on the form. For example, Dr. Phillipot will substitute for Dr. Douglas
 - Proposal defense date
 - Entire Supervisory Committee must attend and examine the student
 - Two internal MSE members may be substituted if necessary
 - Supervisory Committee chair or another member of the committee must pick up the defense paperwork from ASO
 - Forms must be returned within 10 business days of the defense or ASO will process as a failed examination
 - If the exam is passed and the student has already passed the WQE, then the student will be Admitted to Candidacy
 - If the student does not pass the initial attempt of the Proposal Defense, then the 2nd attempt should be taken no later than the last day of classes the following term
- Either requirement can be passed or achieved independently of the other. That is, the academic requirement can be met independent of the research potential requirement, and vice versa.
- ONCE students achieve both requirements they will be admitted to Ph.D. Candidacy before the beginning of the third year. Students not successfully achieving both requirements by the end of their second year will not be admitted to Ph.D. candidacy.
- Time limitations
 - Per the grad school catalog, "All work for the doctorate must be completed within 5 calendar years after the qualifying examination, or this examination must be repeated." NOTE: for the MSE

department, the Qualifying Exam pertains to the completion of both the Academic Requirement and the Research Potential Requirement.

- **Admission to Candidacy – Per the grad school catalog, “All work for the doctorate must be completed within 5 calendar years after the qualifying examination, or this examination must be repeated.” NOTE: for the MSE department, the Qualifying Exam pertains to the completion of both the Academic Requirement and the Research Potential Requirement.**
- **Final Exam – Per the grad school catalog, “The defense should be no more than 6 months before degree award.”**
- **Dissertation Defense**
 - Online announcement must be submitted at least five business days prior to the defense by following the directions below:
 - Go to the **Students-Forms** page on the www.mse.ufl.edu website
 - Click on **Final Examinations (MS-Thesis or PhD)** in the Supervisory Committees/Defenses section, the form is self-explanatory
 - If you have any internal substitutes (maximum of 2), then indicate the substitution on the form. For example, Dr. Phillipot will substitute for Dr. Douglas
 - Dissertation defense date
 - Entire Supervisory Committee must attend and examine the student
 - Two internal MSE members may be substituted if necessary
 - Supervisory Committee chair or another member of the committee will pick up the defense paperwork from ASO, the paperwork will include the ETD Signature Page
 - Final examination forms must be returned within 10 business days of the defense or ASO will process as a failed examination
 - If the ETD signature page is not completed at the final examination, then the student will be given the ETD page for completion. The student must submit the completed ETD page to ASO no later than three business days prior to the Graduate School Editorial Office’s published deadline for Final Examinations

MS Non-Thesis (MSN)

- Required Credit Hours: 30
- Required: 18 credits of EMA5000-6000 level (base-count hours) with a minimum grade of C or better
- Course work is decided between the student and the graduate coordinator
- Maintain a minimum 3.0 gpa in both the cumulative and departmental courses
- Additional options for courses which are relative to the MSN degree
 - Maximum 9 credit hours of coursework outside the Department; of these 3 credits may be an undergraduate course at a 3000-4999 level
 - Maximum 6 credits of S/U graded work of these a maximum of 5 credits of EMA6910 – Supervised Research may be included
- Transfer credits – up to 9 credits of graduate level courses from a Master’s degree at another university may be considered for transfer to count towards the MSN degree with approval of your supervisory chair or the graduate coordinator. In addition per the grad school catalog, “Petitions for transfer of credit for a master’s degree must be made during the student’s first term of enrollment in the Graduate School.” In addition the following must apply:
 - All work transferred must be coursework taken with a grade of B or better

- Student must submit a Transfer of Credit request form electronically via the Student-Forms webpage
- ASO will notify student via email once the form is ready for the graduate coordinator's signature
- Student will need to pick up the form and return it to ASO for processing
- Time limitations – All work, including transferred credits, counted toward the master's degree must be completed during the seven years immediately preceding the date which the degree is awarded
- MSN Non-Thesis Paper – Guidelines for the MSN Non-Thesis Paper may be found on the **Student-Forms** page on the MSE website www.mse.ufl.edu
 - Paper should be submitted to Graduate Coordinator no later than one week prior to the Graduate School Editorial Office's published deadline for Final Clearance deadline for Final Examinations

MS Thesis (MST)

- Required Credit Hours: 30
- Required: 12 credits of EMA5000-6000 level (base-count hours) with a minimum grade of C or better
- Coursework is decided between the student and their MST advisor
- Additional options for courses which are relative to the MST degree
 - Maximum 9 credit hours of coursework outside the Department; of these 3 credits may be an undergraduate course at a 3000-4999 level
 - Maximum 6 credits of EMA6971 – Master's Research
 - Maximum 8 credits of EMA6938 – Special Topics
 - Maximum 6 credits of S/U graded work of these a maximum of 5 credits of EMA6910 – Supervised Research may be included
- Transfer credits – up to 9 credits of graduate level courses from a Master's degree at another university may be considered for transfer to count towards the MST degree with approval of your supervisory chair. In addition per the grad school catalog, "Petitions for transfer of credit for a master's degree must be made during the student's first term of enrollment in the Graduate School." In addition the following must apply:
 - All work transferred must be coursework taken with a grade of B or better
 - Student must submit a Transfer of Credit request form electronically via the Student-Forms webpage
 - ASO will notify student via email once the form is ready for their supervisory chair's signature
 - Student will need to pick up the form and return it to ASO for processing
- Time limitations – All work, including transferred credits, counted toward the master's degree must be completed during the seven years immediately preceding the date on which the degree is awarded
- Supervisory Committee – Rules for the MSE Supervisory Committee are as follows:
 - Must be formed by the end of the 2nd semester or completion of 12 credits
 - To form the committee, students must submit a completed Supervisory Committee Form with signatures from all faculty, the form may be found on the **Students-Forms** page of the MSE website www.mse.ufl.edu
 - Consists of 3 MSE faculty members who hold graduate faculty status with the Graduate School

- Thesis Defense
 - Online announcement must be submitted at least one business day prior to the defense by following the directions below:
 - Go to the **Students-Forms** page on the www.mse.ufl.edu website
 - Click on **Final Examinations (MS-Thesis or PhD)** in the Supervisory Committees/Defenses section, the form is self-explanatory
 - If you have any internal substitutes (maximum of 1), then indicate the substitution on the form. For example, Dr. Phillipot will substitute for Dr. Douglas
 - Thesis defense date
 - Entire Supervisory Committee must attend and examine the student
 - One internal MSE members may be substituted if necessary
 - Supervisory Committee chair or another member of the committee must pick up the defense paperwork from ASO, the paperwork will include the ETD Signature Page
 - Final examination forms must be returned within 10 business days of the defense or ASO will process as a failed examination
 - If the ETD signature page is not completed at the final examination, then the student will be given the ETD page for completion. The student must submit the completed ETD page to ASO no later than three business days prior to the Graduate School Editorial Office's published deadline for Final Examinations

6. Graduation

Prior to the term of graduation, you should meet with ASO staff to conduct a graduation check. Additional requirements are below:

- Apply for the appropriate degree (Master of Science or Doctor of Philosophy) by submitting an online degree application through www.isis.ufl.edu by the posted Registrar's Deadline for the term
- Comply with Graduate School www.gradschool.rgp.ufl.edu rules and Graduate School Thesis/Dissertation and Final Examination Deadlines, refer to the Graduate School and the Editorial Office for the appropriate dates
- Register for the appropriate credits for your degree per the Graduate School. NOTE: students receiving formal funding (GRA, GSFA, etc.) must maintain appropriate registration for their tuition waiver
 - PhD - a minimum 3 credits of EMA7980, Doctoral Research if final term is fall/spring or 2 credits if final term is summer
 - MS Non-Thesis – a minimum 3 credits which are applicable to the degree if final term is fall/spring or 2 credits if final term is summer
 - Applicable courses would include
 - EMA5000-6000 level course
 - Course outside department, if maximum hasn't been taken
 - EMA6910, if maximum S/U credit limits or EMA6910 maximum hasn't been taken

- MS Thesis - a minimum 3 credits of EMA6971, Master's Research if final term is fall/spring or 2 credits if final term is summer
- If this is a terminal degree, then student must complete the Departmental Employment Questionnaire and Exit Interview Checklist and return them to ASO no later than the last day of classes for the term. These forms can be found on the **Student-Forms** page of the MSE website www.mse.ufl.edu