



# **Materials Science & Engineering (MSE)**

## **Graduate Program Guidelines**

**Graduate Handbook**

**2022-2023**

**Effective from 8/15/2022**

This Guide contains information that supplements the University's Graduate Catalog which is the primary document governing all academic programs. Although every effort has been made to maintain accuracy, the Materials Science and Engineering Department reserves the right to correct errors when found, without further notice to students. The presence of errors will not affect the application of the rules and requirements applicable to all students.

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# 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 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 current graduate school catalog may be found at <http://gradcatalog.ufl.edu/> and the Graduate Student Handbook at <http://graduateschool.ufl.edu/media/graduate-school/pdf-files/handbook.pdf>.

The MSE Graduate Handbook is provided to all MSE graduate students to serve as a companion resource to the University of Florida Graduate Catalog. It is the responsibility of the student to be familiar with both publications and to adhere to the stated rules.

It should be noted that for all graduate students, the contract for UF Graduate Assistants United can be found at this link <http://ufgau.org/>.

## 1.1. Department Education Mission

The mission of the Materials Science and Engineering Program (MSE) is to educate students with strong engineering and science backgrounds for Bachelor of Science, Master of Science, or Doctor of Philosophy degrees in Materials Science & Engineering so that they can productively apply their training to the solution of engineering problems in all materials related fields.

## 1.2. Materials Science & Engineering Graduate Program Objectives

Provide students with a strong foundation of materials science & engineering and specialized knowledge, and experience in at least one of the core areas: Biomaterials, Ceramics, Computational Materials, Electronic Materials, Metals, and Polymers.

Provide students with the ability to apply fundamental engineering principles to identify, analyze, and solve scientific and engineering problems for the design and application of materials.

Provide students with the ability to design and conduct scientific and engineering experiments, and to analyze and interpret the resulting data.

Provide students with experience and understanding of design requirements and constraints in the science and engineering environment, including technology transfer.

Provide students with the skills needed to communicate effectively, work collaboratively, and understand their professional and ethical responsibilities and the impact of significant engineering solutions in a societal and economic context.

The field of materials science & engineering is highly interdisciplinary and collaborative, with interactions with other engineering and science disciplines and with professional, engineering, and clinical practice. As such, the graduate programs in MSE benefit from other departments in the Herbert Wertheim College of Engineering (HWCOE), College of Liberal Arts and Sciences (CLAS), College of Medicine (COM), and College of Dentistry (COD) acting as partners in the education of Materials Engineers and Scientists.

## 2. Graduate Faculty

### 2.1. Department Administration

Prof. Michele Manuel  
Chair  
100B Rhines Hall  
[chair@mse.ufl.edu](mailto:chair@mse.ufl.edu)  
(352) 846-3300

Prof. John J. Mecholsky, Jr.  
Associate Chair for MSE  
100D Rhines Hall  
[jmech@mse.ufl.edu](mailto:jmech@mse.ufl.edu)  
(352) 846-3300

Prof. Wolfgang Sigmund  
Graduate Coordinator  
225 Rhines Hall  
[mse-gradcoordinator@mse.ufl.edu](mailto:mse-gradcoordinator@mse.ufl.edu)  
(352) 846-3343

Sonya Robinson  
Human Resources (HR)  
112 Rhines Hall  
[mse-hr@eng.ufl.edu](mailto:mse-hr@eng.ufl.edu)  
(352) 846-3769

Tahara Franklin and Ade Kumuyi  
Academic Advisors  
Academic Services Office (ASO), 108 Rhines Hall  
[advising@mse.ufl.edu](mailto:advising@mse.ufl.edu)  
(352) 846-3312

### 2.2. MSE Faculty

The current tenure/tenure track faculty of the MSE department and their contact information are provided on the MSE website: <https://mse.ufl.edu/people/>.

### **3. Graduate Programs**

The University of Florida's Materials Science and Engineering (MSE) graduate program offers students a world-class education in a world-class research environment. We offer two graduate degrees: Master of Science and Doctor of Philosophy.

Our MSE graduate program includes more than 40 graduate faculty members across multiple colleges and departments and numerous research institutes. Our faculty routinely conduct multi-disciplinary research with researchers in other departments. This provides our graduate students exposure to a broad spectrum of concepts and skills, access to state-of-the-art research instrumentation, and the experience of a vibrant collaborative culture.

MSE graduate students master a set of core concepts and principles critical to a fundamental understanding of materials science and engineering, but also have tremendous flexibility in designing a sequence of coursework and research.

#### **3.1. Placement Exam, Common Curriculum and Core Courses**

Incoming students have to either pass a placement exam on fundamentals of materials science or take the introductory materials science course EMA 6001. EMA 6001 is considered as an elective course towards the degree.

The core courses for the MSE program are:

- EMA 6316: Materials Thermodynamics
- EMA 6313: Materials Structure and Mechanical Properties
- EMA 6136: Diffusion, Kinetics, and Transport
- EMA 6114: Functional Properties of Materials

In addition to the core courses, 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.

All graduate students 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, is in the EDGE program, or is in the final semester before graduation and has received a waiver from the Academic Services Office.

#### **3.2. M.S. Degree Program and Requirements**

##### **3.2.1. Course Requirements**

The MSE Department offers a Master of Science (M.S) degree, which requires 30 credits of course work. The M.S degree may be thesis or non-thesis. The thesis option requires a minimum of 5 credits of supervised research (EMA 6971). The non-thesis Master course work may include up to 5 credit hours of supervised research (EMA 6910).

In addition to the four core courses and the MSE electives, up to 9 credit hours of 5000-level or higher courses from outside the MSE program can be taken based upon a student's specific interests. In certain cases, 3000 or 4000-level courses may be taken with approval of the graduate coordinator.

For the non-thesis degree, the graduate coordinator is designated as the graduate committee chair. For the M.S. thesis degree, the committee consists of the research advisor and two additional faculty members, all of whom need to be Graduate Faculty in Materials Science and Engineering.

### **3.2.2. Final Exam**

All Master's students (thesis and non-thesis) are required to pass a final examination. The final examination should be no more than 6 months before degree is awarded. The M.S. non-thesis students satisfy this requirement by submitting a technical paper, see <http://www.mse.ufl.edu/masters-non-thesis/>. The M.S. thesis students have thesis defense, which is described in Sec. 3.4.

## **3.3. Ph.D. Degree Program and Requirements**

### **3.3.1. Individual Development Plan (IDP) for Graduate Students**

The Individual Development Plan (IDP) is a requirement of the Ph.D. program and it is meant to help guide the Ph.D. graduate student through the entire process of their academic learning experience. The IDP helps to ensure the guidance needed to complete the Ph.D. process including interaction with their graduate committee. The IDP can be found on the Canvas site for all Ph.D. students. There are several action items that need to be completed. They are listed on the syllabus page on Canvas. The items include the following:

- Discuss your self-assessment summary and existing goals with your faculty advisor. Using the [Action Plan Template](#), develop an action plan based on this conversation, to address your target goals, skills, and competencies for the next 12 months. Write this plan together, with the aim of updating and revising it as you make academic and personal progress during your graduate career.
- Discuss your self-assessment summary and existing goals with your faculty advisor. Using the [Mentoring Plan Template](#), develop a mentoring plan to prepare for meetings with your Lead Mentor/Graduate Coordinator, Thesis Committee Group, Thesis Committee One-on-one, and Collaborators. Upload your completed mentoring plan to this assignment.
- Complete the [Self-Assessment Survey](#) and upload your final copy to this assignment. This self-assessment survey allows you to evaluate your current strengths and weaknesses. Please check the boxes according to your ability (1 being low; 3 being high). Use these scores to guide your discussions with your advisor. You may identify targeted goals for this year by using the Goal checkboxes in the relevant skill categories. You may leave the Goals column and Priority column blank if the skill is not one of your goals. You should bring a copy of the completed survey to your advising appointment.

As you implement your IDP, remember to adjust your plans as your circumstances change. It is expected that you regularly meet with your faculty advisor to discuss your progress and achievements. Be sure to verify that your annual meetings with your faculty advisor and committee members have been scheduled, and that previous meetings have been noted on your student record in GIMS.

### **3.3.2. Course Requirements**

The MSE Department offers a Ph.D. degree, which requires 90 credits of course work. In addition to the four core courses, a one-credit course EMA 6920 Professional Development, four credits of EMA 6941 Supervised Teaching, and 6 credits of graduate electives are required. A passing grade for Ph.D. students in the core courses and EMA 6001 is B or better in each course.

### **3.3.3. Research Advisor and Supervisory Committee**

Each Ph.D. student has a supervisory committee whose members guide and supervise the student's research program. This committee is solely responsible for setting specific degree requirements, conducting and reporting on oral examinations, and approving the student's doctoral dissertation. The student should meet at least annually with their supervisory committee to discuss their progress towards the Ph.D. degree.

The student's supervisory committee is usually chaired by his/her research advisor, who must be a Graduate Faculty in Materials Science and Engineering – some 40 faculty – but not necessarily a faculty member of the MSE department. Students must affiliate with a research advisor within the first semester. The other three members of the supervisory committee are selected by the student and the committee chair and typically complement the student's research interests. One committee member must be from outside the Graduate Faculty of Materials Science and Engineering.

Students need to select a research advisor by November 1 of the first semester. Students need to form their Supervisory Committee no later than the end of their second semester of study or after 12 credit hours in order to be able to register for a third semester. The Form can be found at <https://mse.ufl.edu/academics/forms/>. Changes in the membership of the supervisory committee are made by a Committee Change Request form to Academic Advising.

Students without a research advisor will be assigned departmental duties such as a teaching assistant (TA).

### **3.3.4. Qualifying and Proposal Exam**

*Qualifying Exam.* The purpose of the Qualifying Exam is to certify that a student possesses the fundamental knowledge and the academic and research skills necessary to complete a Ph.D. thesis. The successful completion of the exam implies that the course work is nearly completed and that other requirements are either completed or nearly complete. In the Ph.D. Qualifying Exam, the students write a Ph.D. research proposal and defend it orally in front of their supervisory committee. In addition, the exam will test knowledge of the four core subjects.

The students have a maximum of two years from the entry to the graduate program and up to two attempts, to pass the Qualifying Exam. It is recommended to take the exam no later than the end of the 5<sup>th</sup> term (counting the summer term) from the entry to the graduate program. Students converted from the MS program has an extra semester to pass the qualifying exam. The Qualifying Exam is graded pass/fail separately for the writing and oral components. An overall passing grade requires passing both the writing and oral component. All work for the doctorate must be completed within 5 calendar years after the qualifying examination, or this examination must be repeated.

To select a proposal topic, students should consult with their advisor and supervisory committee. The proposal topic – title and abstract – must be submitted to the supervisory committee at least 4 weeks before the Ph.D. qualifying exam. The abstract should include a brief description of the students' *significant independent intellectual contribution* in formulating the proposed research.

*Written Proposal.* The proposal should be prepared as to be submitted to a federal agency for consideration and follow guidelines for the proposal summary, description, and references of the National Science Foundation or other federal agencies (NIH, DOE, DOD, *etc.*). Example proposals can be made available by the faculty advisor or by other graduate students.

The proposal should present original research and lead to new scientific understanding, new properties, or economic benefit. The proposal needs to demonstrate a comprehensive understanding of the literature, describe the tools and techniques to be used to answer the questions raised and how the proposed techniques will specifically answer the questions. The student should discuss the proposal topic and the requirements, expectations and other issues related the qualifying exam with his/her research advisor and the committee. However, the written proposal should be primarily the work of the student. The research advisor will not review or edit the written proposal prior to the submission of the proposal document to the entire supervisory committee.

The document is limited to 20 printed pages including all figures and tables but excluding references. The document should be single sided with 1-inch margins all around. For the proposal text, 1.5 line spacing and a 12-point font should be used. The following topics should be addressed:

- a) Summary of the proposal (1 page)
- b) Introduction, motivation, problem statement, and significance
- c) Objectives of proposed research
- d) Literature background
- e) Proposed research – tasks and experiments to be carried out to achieve objectives
- f) Description of procedure and methods
- g) Description of preliminary work if applicable
- h) Anticipated outcomes and broader impact
- i) Timeline and required resources
- j) References

The information associated with items b-d above should occupy about a quarter of the proposal description, items e-g should occupy about 2/3 and h-i should occupy about 10% (excluding abstract and references).

The written proposal document must be submitted to the Supervisory Committee at least 5 business days before the presentation and oral examination take place.

*Oral presentation and exam.* The proposal presentation and oral examination occur in the same session. Students should coordinate for an appropriate time with their committee and reserve a room for the exam for two hours.

The exam cannot be held on reading days. The exam may be held during the final exam week if the student does not have any non-research courses that semester, or during academic breaks with the approval of the Supervisory Committee. The Qualifying Exam must be announced online at least one business day prior to the defense. Fill out the electronic form “Oral Examination Announcement” found at <https://mse.ufl.edu/academics/forms/>. If you have any internal substitutes (maximum of 2), then indicate the substitution on the form. For example, “Dr. Phillipot

will substitute for Dr. Hennig.” The entire Supervisory Committee must attend and examine the student.

The chair of the committee and the student must be physically present at the exam in the same room. If for any reason, an internal member (not the chair/co-chair) cannot be physically present, they can be substituted. Per the graduate school catalog, up to two internal members can be substituted. The intention is for members to be physically present, so we strongly advise that a member be substituted if they cannot attend. If a substitution isn't possible, then the internal members can attend remotely, as long as it is agreed upon by the entire committee.

If for any reason, the external member cannot be physically present, then they can attend remotely, if it's approved by the entire committee. Per the graduate catalog, external members cannot be substituted, so the student will either need to reschedule or the committee can allow the external to attend remotely.

If for any reason the committee chair or co-chair cannot be physically present, a written request by the committee chair is required to explain the circumstances. The request must be agreed upon by the entire committee. The request needs to be submitted to the department chair for approval.

The focus of the oral examination is on the content of the presentation and the oral communication skills. Providing food or drink is not expected or required and never a consideration by the committee members in evaluation of your merit during an examination.

The proposal presentation should be about 30 minutes in length and complement the written proposal. The presentation should demonstrate to the committee the value of the proposed research and the ability of the student to identify a scientific problem and determine a plan to resolve it. The audience and the committee may ask questions during the presentation or at the end of it. Afterwards, the general audience will be excused.

After the audience is excused, the committee will ask relevant questions to evaluate the students' competency in the chosen field of research and the proposal (presentation and written proposal). In addition, the committee will evaluate the student's competency in the core subjects and graduate level materials science and engineering topics.

Following the oral examination, the student will be excused from the room and the committee will deliberate the student's performance. A pass or fail decision will be made at this time. The written and oral components of the exam will be graded separately. Passing both components is required to pass the Ph.D. Qualifying Exam. The student will be informed of the committee's decision once the deliberation is completed. If a student receives a failing grade in either the written or the oral component, or both, the student can defend the failed component(s) in the next academic term.

Ph.D. students may qualify to apply for a M.S. degree (non-thesis). Application for a M.S. degree should be made at least one semester prior to the semester of anticipated graduation from the Ph.D. program.

### **3.3.5. Supervised Teaching**

In their second or third year, every Ph.D. student will also take four credits of EMA 6941 Supervised Teaching and engage in supervised teaching of students (STS) for two separate courses as part of the course requirement for EMA 6941. The expected workload is 6 hours per week per course. Teaching assignments will be given before the beginning of the semester. It is the student's responsibility to meet with the assigned faculty instructor as soon as the assignment is made to

discuss duties and expectations. Possible duties may include, but are not limited to, host office hours and review sessions, grade homework and exams, help create homework and exam problems, prepare homework and exam solutions, proctor exams, prepare, copy and distribute classroom materials, and attend the lecture and labs. Under special circumstances and agreed upon by the student and instructor, the student can give a lecture.

The TA's performance will be evaluated by both the faculty instructor and the students enrolled in the course. Students who do not receive satisfactory evaluations by the instructor need to repeat the assignment as TA in a future semester. The instructor evaluation will also be forwarded to the TA's research advisor. The TA should communicate regularly and promptly with the instructor to resolve issues related to students' work in the course as well as the performance and duties of the TA. An official grievance process is in place if the TA feels they are being treated unfairly by the students in the course and/or the faculty instructor. The complaint goes to the MSE Graduate Coordinator first, then to the Associate Chair for Academics, and to the Department Chair.

### **3.4. Thesis Defense**

The final Thesis Defense examination for the M.S. (thesis) and Ph.D. degree is in the form of a public defense with open questioning followed by a closed session with private questioning by members of the supervisory committee. Students should coordinate for an appropriate time for the thesis defense with their committee and reserve a room for the exam for two hours.

The focus of the oral examination is on the content of the presentation and the oral communication skills. Providing food or drink is not expected or required and never a consideration by the committee members in evaluation of your merit during an examination.

At the time of the Thesis Defense, the written dissertation must be completed in all respects and editorially acceptable for final approval, though it may be modified as a result of the exam. The dissertation document must be submitted to the Supervisory Committee at least 5 business days before the presentation and oral examination take place. The student should contact the committee to verify the acceptable form (type of file or printed version) of dissertation submission. It is the responsibility of the student to ensure that all requirements of the Materials Science and Engineering program and the Graduate School have been successfully completed in order to be awarded a M.S. or Ph.D. degree.

The Thesis Defense must be announced online at least one business day prior to the defense. Fill out the electronic form "Final Examinations (M.S.-Thesis or Ph.D.)" found at <https://mse.ufl.edu/academics/forms/>.

If you have any internal substitutes (maximum of 2), then indicate the substitution on the form. For example, "Dr. Phillipot will substitute for Dr. Hennig." The entire Supervisory Committee must attend and examine the student. The chair must be physically present at the exam, others can call in remotely. Two internal MSE members may be substituted if necessary. Final examination forms must be returned within 5 business days of the defense or ASO will process as a failed examination.

The student must submit the completed Electronic Thesis or Dissertation (ETD) signature page to ASO no later than three business days prior to the Graduate School Editorial Office's deadline. If the ETD signature page is not completed at the final examination, then the student will be given the ETD page for completion. The defense should be no more than 6 months before the Ph.D. degree is awarded.

The successful completion of the Final Examination must be updated into GIMS by the deadline defined by the UF Graduate School, which is posted on the UF Academic Calendar for each semester. *Note that this deadline is typically several weeks prior to the end of classes for that semester.* It is the student's responsibility to ensure that their Final Examination Report is submitted to their Supervisory Chair with sufficient lead-time to permit review, feedback, modification, assignment of final grade, submission of Final Examination Report Form, and uploading of this form by the GAO.

If the student receives a U grade in the Final Examination, he/she must retake the exam in the next semester. The Final Examination may be retaken only once. If a second U grade is awarded, the student will be released from the program.

Table I. Summary of the graduate degree requirements.

<b>SCH (Semester Credits Hours) Requirements</b>	<b>Master (Thesis)</b>	<b>Master (Non-thesis)</b>	<b>Doctor of Philosophy</b>
Total SCH	30 <sup>a</sup>	30 <sup>a</sup>	90 <sup>a,b</sup>
MSE Core Requirements	12	12	13
MSE Electives	≥6	≥6	≥6
Specialization Electives <sup>c</sup>	≤9	≤9	variable
Supervised Teaching	N/A	N/A	4
Research/Special Project	≤5	0	variable
Supervisory committee members (minimum number)	3	1 <sup>d</sup>	4
Qualifying Exam	None	None	Yes
Final Exam	Oral defense and written thesis	Written <sup>e</sup>	Oral defense and written thesis
Time limit for completing degree	7 years	7 years	5 years <sup>f</sup>

<sup>a</sup> Beyond B.S.

<sup>b</sup> May include credit hours from Master's program

<sup>c</sup> Graduate level coursework outside of MSE approved by graduate coordinator

<sup>d</sup> Supervisory Chair only

<sup>e</sup> Technical paper graded by Graduate Coordinator

<sup>f</sup> From admission to Ph.D. Candidacy, passing Qualifying Exam.

## 4. Courses and Registration

### 4.1. Registration Requirements

Full-time registration is usually 6-12 credits, depending on the semester and appointment. Graduate students on appointments as Graduate Research Assistants with a typical FTE of 0.5 are

required to register for 9 credits in the Fall/Spring term and 6 in the summer C term (or 3 in summer A and 3 in summer B). Students not on appointment may wish to enroll full time to finish their degrees in the minimum timeframe or may be required to enroll full time by external funding agencies or their academic units. See the MSE ASO or HR for information regarding FTE, required course hour enrollment, and other requirements associated with your appointment.

Course registrations are processed by the Academics Services Office. You must complete a graduate registration form, which can be found at: <https://mse.ufl.edu/academics/forms/>. Please read the instructions on the form carefully. Master's non-thesis registration forms are approved by the Graduate Coordinator of their respective programs. Master's thesis and Doctoral student's registration forms are approved by their research advisor, as well as the Graduate Coordinator. Once approved, the forms are routed to the Academic Services Office for processing. To allow time for registration requests to be processed, we recommend that students submit their registration form no later than two weeks prior to the registration deadline for the upcoming term.

Students should seek advice from their advisor or the graduate coordinator prior to submitting their registration form. Guidance will be provided for registration in the form of the required courses and suggested electives. Students need to register on time to avoid unnecessary late registration fees. Registration and payment deadlines for each semester can be found at <https://gradcatalog.ufl.edu/graduate/calendar/>. Students need to pay any fees by the fee payment deadline, even if a tuition waiver has not been processed. Registration may be restricted. To check for record holds, registration holds, and late registration fees, go to Student Self Service (<https://one.ufl.edu/>) To review the anticipated schedule of courses for an upcoming semester, students should go to <https://one.ufl.edu/soc/>. Students have access to their degree audit online at [www.student.ufl.edu](http://www.student.ufl.edu). *Students are ultimately responsible* for ensuring they are on track to finish their degrees.

To review the anticipated schedule of courses for an upcoming semester, students should go to <https://one.ufl.edu/soc/>. EDGE students can also review EDGE course listings at <https://ufedge.ufl.edu/online-graduate-programs/courses/>. The graduate degree audits are under construction so they should not be used; however, students can review their academic record by checking their unofficial UF transcript via <https://one.ufl.edu>. Students are ultimately responsible for ensuring they are on track to finish their degrees. If a student has any questions about their academic progress, they should schedule a meeting with an academic advisor immediately. Advisors can be contacted at [advising@mse.ufl.edu](mailto:advising@mse.ufl.edu).

During the final semester, students must register for the appropriate credits for their degree. 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; and Doctoral students must enroll in EMA 7980. Students receiving a tuition waiver (GRA, GSPA, etc.) must follow their tuition waiver requirements (typically 9 or 12 credits in spring/fall and 6 in summer). PhD students without a tuition waiver need to register for a minimum of 3 credits in EMA 7980 (Doctoral Research) if the final semester is fall or spring and 2 credits if the final semester is summer. M.S. Non-thesis students without a tuition waiver need to register for a minimum of 3 credits, which are applicable to the degree if the final semester is fall/spring and 2 credits if the final semester is summer. M.S. Thesis students without a tuition waiver need to register for a minimum of 3 credits in EMA 6971 (Master's Research) if the final semester is fall/spring or 2 credits if the final semester is summer. This minimum final semester registration is applicable to all graduate students. The Graduate School will not accept petitions to this policy.

Thesis and Dissertation students who complete all graduate degree requirements during a given semester but fail to meet the final submission or final clearance deadline, may receive their degree in the following semester without registering for credits (this is called “clearing prior”). Please email [advising@mse.ufl.edu](mailto:advising@mse.ufl.edu) for specific eligibility requirements defined by the Graduate School. More information about clearing prior can be found here: <http://graduateschool.ufl.edu/about-us/offices/editorial/editorial-deadlines/>.

## 4.2. Courses and Credits

Courses listed at 5000 and above are considered graduate courses and are limited to graduate students. Courses numbered 7000 and above are designed primarily for Ph.D. candidacy students, who have passed their Qualifying Exam.

Generally, graduate courses may not be repeated for additional credit. However, selected courses are designed to be taken multiple semesters. These repeatable courses are designed and typically subjected to a maximum number of credit hours, including courses numbered EMA 6971, EMA 7979, and EMA 7980.

No more than five credits each of EMA 6910 (Supervised Research) and EMA 6941 (Supervised Teaching) may be taken. Course numbers EMA 6971 (Masters Research), EMA 7979 (Advanced Research), and EMA 7980 (Doctoral Research) cannot count towards the Masters Non-Thesis degree. Masters Non-Thesis degree students can take EGN 6913 to do research in a faculty lab. Courses numbered EMA 7979 and EMA 7980 are not eligible to count toward the M.S. degree program.

A maximum of 6 credits of S/U graded work may be counted towards the degree.

If a student lacks instruction in a particular area, the Associate Chair, Supervisor, or Graduate Advisor may suggest course(s) to enhance this student’s education to the benefit of that student and his/her matriculation and experience through the Graduate Program in MSE. For these select cases, a course could potentially not be at the graduate level, (but must be at least 3000) and could be credited towards the graduate degree (with an approved petition). *This course, however, must be approved prior to enrollment.*

A Tuition and Fee Calculator is provided by UF at <http://www.fa.ufl.edu/bursar/current-students/>.

## 4.3. Transfer Credit

Graduate level courses from another university, may be considered for transfer to count towards the M.S. or Ph.D. degree with approval of your supervisory chair or the graduate coordinator. For the M.S. program, up to nine credits may be transferred. For the Ph.D. program, up to 30 credits may be transferred. All work transferred must be coursework taken with a grade of B or better. For Transfer of Credit, students need to contact Academic Services Offices and send the transcript by email to [advising@mse.ufl.edu](mailto:advising@mse.ufl.edu). The final decision will be made by the graduate school. 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. All work, including transferred credits, counted toward the degree must be completed during the seven years immediately preceding the date which the degree is awarded.

#### **4.4. Add/Drop**

Courses may be dropped or added during the drop/add period without penalty; however, students on fellowships or assistantships must clear these changes with their faculty advisor prior to modifications. This period typically lasts five UF calendar days, or two days for summer sessions, beginning with the first day of the semester (exact dates available on <https://student.ufl.edu>). Classes that meet for the first time after the drop/add period may be dropped without academic penalty or fee liability by the end of the next business day after the first meeting of the class. Note, this does not apply to laboratory sections. After this period, a course may be dropped and a W will appear on the transcript. *Students become financially liable for any course added or dropped after the deadline, including students with fee waivers.*

#### **4.5. Retaking Courses**

Graduate students may only repeat a course once in which they earn a failing grade. Grade points from both the initial failed attempt and the second attempt are included in computing the grade point average. The student receives credit for the satisfactory attempt only.

### **5. Grades**

The only passing grades for graduate students are A, A-, B+, B, B-, C+, C, and S. A student is considered in good academic standing if the student's GPAs are above 3.00 (truncated). There is an overall GPA, an MSE major GPA and if elected a minor GPA that all have to be at least 3.00. If any of these GPA's drops below 3.00 the student is in academic probation, which triggers limitations in course selection for registration. Students with less than 3.00 GPA may not hold an assistantship or fellowship. Students also cannot graduate if any of their GPAs are below 3.00 (truncated). Grade points are not designated for S and U grades and are not used in calculating the grade point average; however, a grade I (incomplete) will convert to a 0.0 credit if not changed within 1 semester. All letter graded courses taken as a graduate student are used in calculating the cumulative grade point average. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are included in grade point average calculations.

### **6. Research**

All students conducting research in a laboratory must be registered for research credits or on a paid appointment. All researchers must follow appropriate MSE policies for laboratory access (see your Supervisory Chair for guidance). International students that seek to work in a research laboratory at UF, however, are *required to either be enrolled in a research course or be paid for their effort*, to ensure compliance with student visa policies. The specific course number to enroll in order to account for research effort is dependent upon the degree program (M.S. or Ph.D.) and desired credit. See Section 3.10 for further details regarding appropriate research courses.

Safety and Responsible Conduct in Research training is required *prior* to enrollment in research credit (see Sections 6.1 and 6.2 for details). This is *enforced* for students on NSF, NIH, and USDA awards.

## 6.1. Safety

The Materials Science & Engineering Department, in collaboration with the Herbert Wertheim College of Engineering, is committed to providing a safe and healthy working and learning environment for all of its students (<https://www.eng.ufl.edu/labsafety/>). Sustaining a culture of excellent laboratory safety starts with rigorous training. To facilitate appropriate training of safety concerns, all MSE students are required to complete a laboratory checklist prior to gaining access to the laboratory:

<https://www.eng.ufl.edu/labsafety/resources/engineering-laboratory-safety-guidelines-and-training-checklist/>.

This checklist outlines required general safety training needed for general work in the building. Additional training will be needed, given the specific research conducted and risk encountered in your work. Guidance on the lab-specific training needed will be provided by your Supervisory Chair, as all Chairs are required to provide a safe working environment, ensure adequate safety training of their personnel, and maintain appropriate safety records for their own labs. Remember that most training is annual, so it must be updated. To further promote a culture of safety, our department has a MSE Student Safety Council (SSC), which is comprised of graduate and undergraduate students, faculty, and the MSE Director of Undergraduate Laboratories; an Engineering Safety Steering Committee serves at the college level. Students are strongly encouraged to join these councils. Any concerns regarding safety or training should be directed to your Supervisory Chair, the SSC, the HWCOE Director of Laboratory Safety, or UF Environmental Health and Safety (<http://www.ehs.ufl.edu/>).

## 6.2. Responsible Conduct in Research (RCR)

Responsible conduct in research (RCR) is expected for all University of Florida students. Students conducting research will be expected to follow ethical standards when conducting research, from identification of potential conflicts of interest to responsible authorship and publication. To assist in supporting this endeavor, all students enrolled in research credits and students funded by NSF, NIH, or USDA awards must complete the general RCR training:

<http://research.ufl.edu/faculty-and-staff/research-compliance/responsible-conduct-in-research-rcr-training/navigation-to-citi-for-rcr-responsible-conduct-of-research-training.html>.

# 7. General Information

## 7.1. Graduate Coordinator

The graduate coordinator is the advisor to all admitted and present UF MSE graduate students who have not yet joined a research group or don't have a research advisor. All UF MSE non-thesis master students are advised by the graduate coordinator. The graduate coordinator helps in planning the courses, advises on certificates, minors, and majors and guides the students in addition to the rules provided by the graduate school and the department. Furthermore, transfer credits are processed. The graduate coordinator is not able to assist applicants or non-admitted students. Admitted international students can get additional letters for US-visa issuance if the US-embassy requires more information than was provided by the UF International Office.

## **7.2. Academic Services Office**

The Academic Services Office (ASO) serves as the graduate advising and administration unit and is administered by the Associate Chair of MSE and the Academic Advisor. The Academic Advisor serves to assist graduate students in admission, deadlines, course requirements, registration, and routine administrative issues. Inquiries regarding the graduate program should first be made to the Academic Advisor ([advising@mse.ufl.edu](mailto:advising@mse.ufl.edu)), which can then be forwarded to the Associate Chair, if needed. The Academic Advisor is available to meet with any student during office hours or by appointment, which can be scheduled by email to [advising@mse.ufl.edu](mailto:advising@mse.ufl.edu).

## **7.3. MSE Graduate Program Committees**

The Associate Chair of MSE oversees the operation of the MSE Graduate Program, is responsible for academic program administration and policy directions, ensuring policy compliance with both MSE and the Graduate School. The admissions committee oversees admission of incoming students. The curriculum committee suggests academic policy changes. The petitions committee reviews student petitions. A student may petition with academic issues by submitting a formal request via the MSE website with the Academic Services Office. Petitions must be formally approved or disapproved by the petitions committee.

## **7.4. Department Student Council**

The purpose of Department Student Council (DSC) is to 1) provide an agency for the coordination of materials science & engineering student activities to promote common goals and interests of the MSE graduate student body, 2) advance and enrich the academic and educational experience of graduate students in the UF MSE Department, and 3) seek the improvement of MSE graduate student education through active communication and representation between MSE students and faculty, and other governing bodies at the University of Florida such as the Graduate Student Council and UF Student Government. All MSE graduate students are welcome to attend DSC meetings and are encouraged to become involved in this organization. See the website for more information: <http://www.mse.ufl.edu/about/societies/>.

## **7.5. Graduate Guidelines and Catalog Year**

The catalog year determines the set of academic requirements that must be fulfilled for graduation from the program. Students graduate under the catalog in effect when they begin enrollment for that degree at UF, provided they maintain continuous enrollment. A catalog year runs from Summer B of one year to Summer A of the next year. Students who are unregistered for 2 or more consecutive semesters must reapply for admission and will be assigned the catalog in effect when enrollment is resumed. Students transitioning to a more advanced degree (e.g., Masters to Doctoral) must follow the catalog year in effect when they begin the new degree program. If a catalog change occurs during the program of a student, the student has the choice to select the current catalog year requirements or remain under the original catalog requirements.

## **7.6. Graduate Assistantships, Fellowships, and Awards**

The Department of Materials Science & Engineering offers Graduate Assistantships to select students in good academic standing. Stipend rates paid are determined by the department and based on graduate standing and degree program. Interested students should follow up with the Academic

Services Office (ASO) regarding the availability of assistantships and the procedure for applying. Students are highly encouraged to apply for external fellowships such as NSF, NIH NRSA, NDSEG, DoD, DOE, and DHS. See the MSE website for more information on these opportunities: <http://www.mse.ufl.edu/fellowships/>.

Out-of-state or international students, who are not on traditional funding, may be awarded partial financial support via the College Award (CA). No other funding, e.g., assistantship and fellowship, may be held concurrently. The students must notify ASO upon receipt of other funding, e.g., fellowship or assistantship. Support for services that do not contribute to their degree program is permitted, e.g., outside employment, temporary Other Personnel Services (OPS) in department. The CA provides for a maximum of 36 credit hours within the first two years of enrollment. Students pay a set rate per credit hour; this amount is provided in the original offer letter. The students must maintain a minimum 3.0 GPA in both the departmental and cumulative courses.

Students can find on-campus jobs through [www.jobs.ufl.edu](http://www.jobs.ufl.edu). Graduate students cannot volunteer to work in the department, they must either be compensated for their work in a lab or be registered for research under the faculty member's supervision.

Students appointed as Graduate Assistants or Graduate Fellows are still responsible for paying applicable student fees per semester credit hour. Further, they will be financially liable for excess credits beyond the required registration (see appointment letter for details). If a student on appointment drops below the required registration at any time in the semester, the student becomes financially liable for the entire registration cost.

## 7.7. Professional Work

Graduate students may receive credit toward their degrees for courses in professional programs (e.g., D.V.M., or M.D.) when their advisors and graduate coordinators certify that the course work is appropriate for their programs and when the students receive permission from the academic units and colleges offering the courses. See the UF Graduate Catalog (Courses and Credits section) for further details.

## 8. Internships

Students are required to notify ASO and if on funding HR about any internship they plan to accept.

Students may register for internship credits by completing and submitting the internship form at <https://mse.ufl.edu/academics/forms/>. The offer letter from the company should be attached. The student needs to have permission from their supervisory committee chair or graduate coordinator if the student has no supervisory committee. ASO will review the form and notify the student via email if the registration is approved or not. If approved ASO will register the student for EGN 5949.

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 to receive a grade for that term:

- Internship Employer Evaluation Form
- Student Work Report
- Technical report (please contact advising concerning specific requirements for the technical report).

These forms are available at: <https://mse.ufl.edu/academics/forms/>.

International students can accept internship through Curricular Practical Training (CPT). Instructions for the CPT and the registration requirements can be found at <http://www.ufic.ufl.edu>. To apply students should follow the registration for internship instructions above by the appropriate deadline: April 1 – summer CPT, July 1 – fall CPT, and 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 taxes will be taken out of their stipends: <http://www.fa.ufl.edu/tax/>.

Graduate Insurance: Students on appointments receiving health care benefits, please refer to <http://www.hr.ufl.edu/benefits/gatorgradcare/> for additional information.

## **9. Academic Honesty**

All enrolled UF students have signed a statement of academic honesty upon enrollment, which commits the student to holding themselves and their peers accountable for maintaining the highest standard of honor (see <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>). This standard is essential to maintain the integrity of the program. Students are expected to work independently on coursework and program examinations, unless specifically authorized by the instructor or supervisor. It is always better to clarify permitted degrees of collaboration than to assume and be incorrect. Plagiarism of any form, from course assignments to doctoral dissertations, is a serious offense and will never be tolerated. Students are responsible for seeking and utilizing resources to understand the definition of plagiarism, see for example:

<https://mediasite.video.ufl.edu/Mediasite/Play/adaa44500eaf460a84f238e6b9a558f9>,  
<http://usingsources.fas.harvard.edu/icb/icb.do?keyword=k70847&pageid=icb.page342057>.

Further, students can register for iThenticate, TurnItIn, or other plagiarism detection software to help screen their documents to avoid inadvertent plagiarism. Failure to comply with the honor code will result in disciplinary action that can span from grade penalties up to dismissal from the program.

## **10. Satisfactory Progress and Scholarship**

Every student is expected to make satisfactory progress toward graduation each semester. This includes maintaining a grade point average (GPA) of B (3.0) or higher both cumulatively and in their major (and in the minor, if a minor is declared), the timely meeting of academic milestones, e.g., passing the Qualifying Examination, and obey the Honors Code. Students with a GPA of less than 3.0 GPA may not hold an assistantship or fellowship.

Students who fail to make satisfactory progress may be required to seek advisement and fulfill specific conditions in order to continue in the major, or may be denied further registration in the program. Students who fail to maintain the minimum 3.0 GPA in either the cumulative or departmental courses are placed on Academic Probation and may need to petition to maintain funding.

## **11. Correspondence and Forms**

Students must correspond and comply with outlined policies via electronic or hardcopy means.

For electronic communications, all students are provided with a University of Florida email account (ufl.edu) upon entrance to the program. ASO will use this UF account for all official communications. *Students are responsible for promptly and thoroughly reading emails from these accounts and are expected to communicate in a professional manner.* For hardcopy correspondence, all documents, including forms, should be fully completed and submitted directly to the ASO. To minimize paperwork burden, the ASO encourages electronic submissions (email to [advising@mse.ufl.edu](mailto:advising@mse.ufl.edu)) and accepts electronic signatures, unless specifically stated otherwise. Submission of forms may require the student to comply with deadlines. Otherwise, financial penalties may occur, e.g., for late registration.

## 12. Preparation for Final Semester

*It is the student's responsibility to ascertain that all requirements have been met and that every deadline is observed.* Deadline dates are set forth by the registrar's office (<https://one.ufl.edu>) and the MSE department.

Prior to the semester of graduation, students should meet with ASO staff to conduct a graduation check. Students must notify the ASO of graduation plans no later than the Graduate School registration deadline for their program. At the beginning of the final semester, students must also file a degree application online through Student Self Service (<https://one.ufl.edu/>) and must meet minimum registration requirements. Master's Thesis and PhD students should obtain the checklist (<http://graduateschool.ufl.edu/graduate-life/graduation/graduation-checklist/>) for their relevant degrees from the Graduate School website to ensure compliance with MSE and Graduate School requirements and final examination deadlines posted at <http://graduateschool.ufl.edu/graduation/thesis-and-dissertation>.

Students must register for the appropriate credits for their degree. Students receiving a tuition waiver (GRA, GSPA, etc.) must follow their tuition waiver requirements (typically 9 or 12 credits in spring/fall and 6 in summer). PhD students without a tuition waiver need to register for a minimum of 3 credits in EMA7980 (Doctoral Research) if the final semester is fall or spring and 2 credits if the final semester is summer.

MS Non-thesis students without a tuition waiver need to register for a minimum of 3 credits, which are applicable to the degree if the final semester is fall/spring and 2 credits if the final semester is summer. Applicable courses include EMA5000-6000 level courses, courses outside the department if the maximum has not been taken, EMA6910 (Supervised Research) if the maximum S/U credit limit (6 credit hours) and the maximum credit limit of EMA6910 (5 credit hours) has not been reached. Non-thesis M.S. students need to submit a technical paper in their final semester, see <http://www.mse.ufl.edu/masters-non-thesis/>.

MS Thesis students without a tuition waiver need to register for a minimum of 3 credits in EMA6971 (Master's Research) if the final semester is fall/spring or 2 credits if the final semester is summer. If this is a terminal degree, the student must complete the Departmental Exit Survey. The request to complete the Exit Survey is sent out to students via email during their final graduating term.

For deadline information regarding submissions to the Graduate Editorial Office, please visit: <http://helpdesk.ufl.edu/application-support-center/graduate-editorial-office/>. When the

dissertation or thesis is ready to be put in final form, the following website offers formatting information: <https://asc.helpdesk.ufl.edu/>.

It is solely each student's responsibility to ensure that all required forms are submitted in accordance with Department and Graduate School deadlines.

### **13. Student Responsibility**

The student is responsible for becoming informed and observing all program regulations and procedures. The student must be familiar with UF Graduate Catalog general regulations and requirements, specific degree program requirements, and offerings and requirements of the major academic unit. *Rules are not waived for ignorance.* It is also the student's responsibility to check their UF email on a regular basis. Failure to do so will not be a valid excuse for missing deadlines. Under no circumstances will a faculty advisor be responsible for meeting student deadlines.

## 14. Appendix

### 14.1. Approved Specialty Courses

Students may designate specialty courses from the following list to fulfill the specialty requirement for Ph.D. degree.

#### Ceramics:

- EMA 6109: Physical Chemistry of High Temperature Materials
- EMA 6319: Applied Colloid Science
- EMA 6445: Electroceramics
- EMA 6446: Solid State Ionics
- EMA 6448: Ceramic Processing
- EMA 6540: Fundamentals of Crystallography
- EMA 6715: Fracture of Brittle Materials
- EMA 6804: Quantum Methods in Computational Materials Science

#### Electronic Materials:

- EMA 6110: Electron Theory in Solids
- EMA 6616: Advanced Electronic Material Processing
- EMA 6412: Synthesis and Characterization of Electronic Materials
- EMA 6416: Organic Electronics

#### Metals:

- EMA6625: Advanced Metals Processing
- EMA6510: Survey of Materials Analysis Techniques
- EMA6106: Advanced Phase Diagrams
- EMA6107: High Temperature Alloys

#### Polymers:

- EMA 6165: Polymer Physical Science
- EMA 6461: Polymer Characterization
- EMA 6581: Polymeric Biomaterials

#### Biomaterials:

- EMA 6165: Polymer Physical Science
- EMA 6461: Polymer Characterization
- EMA 6581: Polymeric Biomaterials
- EMA 6580: Science of Biomaterials

## 14.2. Course Checklists

### Checklist M.S. (non-thesis) Program

<b>MSE Core (12 credits total)</b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA 6313 Materials Structure and Mechanical Properties	3		
<input type="checkbox"/> EMA 6114 Functional Properties of Materials	3		
<input type="checkbox"/> EMA 6316 Materials Thermodynamics	3		
<input type="checkbox"/> EMA 6136 Diffusion, Kinetics, & Transport	3		

<b>MSE Electives (6 credits minimum)<sup>a</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA			

<sup>a</sup> Any graduate-level EMA-prefix course (including S/U graded course).

<b>Specialization Electives (9 credits maximum)<sup>b</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/>			

<sup>b</sup> Any 5000-level or higher course in the College of Engineering, and the Physics, Chemistry, and Mathematics Department (other courses require special approval). Excludes S/U graded courses.

### Checklist M.S. (thesis) Program

<b>MSE Core (12 credits total)</b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA 6313 Materials Structure and Mechanical Properties	3		
<input type="checkbox"/> EMA 6114 Functional Properties of Materials	3		
<input type="checkbox"/> EMA 6316 Materials Thermodynamics	3		
<input type="checkbox"/> EMA 6136 Diffusion, Kinetics, & Transport	3		

<b>MSE Electives (6 credits minimum)<sup>a</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA			

<sup>a</sup> Any graduate-level EMA-prefix course (including S/U graded course).

<b>Specialization Electives (9 credits maximum)<sup>b</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/>			

<sup>b</sup> Any 5000-level or higher course in the College of Engineering (3000 and 4000 only with special approval). Excludes S/U graded courses.

<b>Thesis credits (5 credits)<sup>c</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA 6971 Master's Thesis			
<input type="checkbox"/> EMA 6971 Master's Thesis (graduating term)			

<sup>c</sup> M.S. Thesis students must enroll in MSE 6971 during their final graduating term for a minimum of 3 credits for Fall/Spring or 2 credits for Summer.

## Checklist Ph.D. Program

<b>MSE Core (17 credits total)</b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA 6313 Materials Structure and Mechanical Properties	3		
<input type="checkbox"/> EMA 6114 Functional Properties of Materials	3		
<input type="checkbox"/> EMA 6316 Materials Thermodynamics	3		
<input type="checkbox"/> EMA 6136 Diffusion, Kinetics, & Transport	3		
<input type="checkbox"/> EMA 6920 Professional Development	1		
<input type="checkbox"/> EMA 6941 Supervised Teaching	2		
<input type="checkbox"/> EMA 6941 Supervised Teaching	2		

<b>MSE Electives (6 credits minimum)<sup>a</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA			
<input type="checkbox"/> EMA			
<input type="checkbox"/> EMA			

<sup>a</sup> Any letter-graded graduate-level EMA-prefix or advisor approved.

<b>Specialization Electives<sup>b</sup></b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/>			

<sup>b</sup> Any 5000-level or higher course in the College of Engineering (3000 and 4000 only with special approval). Excludes S/U graded courses.

### 14.3. Degree Timeline and Deadlines for Ph.D. students

The following table illustrates a typical timeline to the Ph.D. degree.

<b>Time</b>	<b>Milestone</b>
1 <sup>st</sup> semester	Select of a doctoral advisor
2 <sup>nd</sup> semester	Pass graduate core courses (B or better)
End of 1 <sup>st</sup> year	Ph.D. supervisory committee
2 <sup>nd</sup> year	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
4 <sup>th</sup> -5 <sup>th</sup> year	Ph.D. dissertation defense

## Checklist: minor in MSE for Master and PhD students

UF graduate students who want to get a minor in MSE must take 9 credit hours of MSE courses for Master students or 12 credit hours of MSE courses for PhD students in other majors. The minor in MSE is set up by contacting the graduate coordinator in your home department (major) and the graduate coordinator in MSE via email. After consultation a contract is made that list which courses are required to be taken for granting a minor in MSE. This has to be arranged before or at the beginning of the minor.

A minimum of one core course of MSE is required. The other two courses can be electives that fit the educational or research interests of the student. Only letter grade courses are allowed. No S/U courses.

<b>At least one MSE Core (3 credits)</b>	<b>Credits</b>	<b>Semester/Year</b>	<b>Grade</b>
<input type="checkbox"/> EMA 6313 Materials Structure and Mechanical Properties	3		
<input type="checkbox"/> EMA 6114 Functional Properties of Materials	3		
<input type="checkbox"/> EMA 6316 Materials Thermodynamics	3		
<input type="checkbox"/> EMA 6136 Diffusion, Kinetics, & Transport	3		

Other courses to select from to complete a total of 9 or 12 credits:

Ceramics:

- EMA 6109: Physical Chemistry of High Temperature Materials
- EMA 6319: Applied Colloid Science
- EMA 6445: Electroceramics
- EMA 6446: Solid State Ionics
- EMA 6448: Ceramic Processing
- EMA 6540: Fundamentals of Crystallography
- EMA 6715: Fracture of Brittle Materials
- EMA 6804: Quantum Methods in Computational Materials Science

Electronic Materials:

- EMA 6110: Electron Theory in Solids
- EMA 6616: Advanced Electronic Material Processing
- EMA 6412: Synthesis and Characterization of Electronic Materials
- EMA 6416: Organic Electronics

Metals:

- EMA6625: Advanced Metals Processing
- EMA6510: Survey of Materials Analysis Techniques
- EMA6106: Advanced Phase Diagrams
- EMA6107: High Temperature Alloys

Polymers:

- EMA 6165: Polymer Physical Science
- EMA 6461: Polymer Characterization
- EMA 6581: Polymeric Biomaterials

Biomaterials:

- EMA 6165: Polymer Physical Science
- EMA 6461: Polymer Characterization
- EMA 6581: Polymeric Biomaterials
- EMA 6580: Science of Biomaterials

### **MSE major graduate students to get a minor**

UF MSE graduate students who want to get a minor in another field of study must take 9 hours of coursework for Master students or 12 credit hours for PhD students at 5000-level or above. The minor is set up by contacting the graduate coordinator in MSE (major) and the graduate coordinator in your desired minor field via email. After consultation a contract is made that lists which courses are required to be taken for granting a minor. This has to be arranged before or at the beginning of taking classes for the minor. Only letter grade courses are allowed. No S/U courses. A minimum GPA of 3.00 for the minor has to be achieved for successful completion.

### **Nontraditional Doctoral/Master's degree program**

Students who are interested in pursuing M.S. and Ph.D. degrees in 2 different or more disciplines need to file paperwork for a nontraditional degree or a concurrent degree with the program coordinators in MSE and the other program(s). Students will have to complete 21 credit hours offered from the Materials Science and Engineering program (EMA prefix only) to earn the M.S. degree. A maximum of 9 credits can be shared between both programs. The form can be found at: <http://graduateschool.ufl.edu/faculty--staff/forms/>. Students must contact the academic services office at [advising@mse.ufl.edu](mailto:advising@mse.ufl.edu) to generate and submit the correct form.

### **Transfer students who move to UF**

Students that transfer to the M.S. or Ph.D. program in MSE have to establish a GPA before they are allowed to take only S/U coursework. A minimum of 12 credit hours of letter grade courses at UF have to be taken to establish a GPA.

## **From Graduate School Handbook**

### **GRIEVANCE PROCEDURE FOR ACADEMIC PROBLEMS.**

The University of Florida is committed to a policy of treating all members of the university community fairly in regard to their personal and professional concerns. A formal grievance procedure exists to ensure each graduate student is given adequate opportunity to bring complaints and problems of an academic nature, exclusive of grades, to the attention of the University administration with the assurance each concern be given fair consideration. Individual academic units, departments or colleges may have more detailed grievance procedures. The student should check with his or her program's graduate coordinator for information about individual unit grievance procedures. A grievance is defined as dissatisfaction occurring when a student thinks that any condition affecting him or her is unjust or inequitable or creates an unnecessary hardship. Areas in which student grievances may arise include scientific misconduct, sexual harassment, discrimination, employment-related concerns, and academic matters. The University has various mechanisms available for handling these problems when they arise. In general, it is desirable to settle concerns in an informal fashion rather than initiating a formal grievance. Communication is a key element. As soon as an issue arises, the student should speak with either the supervisory committee chair or the departmental graduate coordinator. If neither of these individuals is available or if they are part of the circumstance of concern, the department chair is the next alternative. Grievance Procedure Step 1. Oral discussion between the graduate student and the person(s) alleged to have caused the grievance is strongly encouraged. The discussion should be held as soon as the student first becomes aware of the act or condition that is the basis of the grievance. The student may wish to present his or her grievance in writing to the person(s) alleged to have caused the grievance. The person alleged to have caused the grievance must respond to the student either orally or in writing. Step 2. If the student considers the response to the discussion and/or written document from Step 1 to be unsatisfactory and feels that the grievance still exists, the grievance should be brought in writing, with all supporting documentation, to the department chair or a designated representative of the department. The department chair or designated representative of the department must respond to the student's grievance in writing in a timely fashion. Step 3. If the grievance is still considered to be unresolved, the student may then file the grievance in writing with the dean of the college, who shall investigate the matter and respond to the student in writing within a reasonable timeframe. Step 4. The right of appeal in writing to the Ombuds for graduate and professional students, as the authorized representative of the President of the University, shall be the final appeal but only after the above steps 1–3 have been exhausted. The Office of the Ombuds is located in 31 Tigert Hall, 392-1308 and their website is <http://www.ombuds.ufl.edu>. Other Grievance Resources: Most employment-related grievances are covered by the Collective Bargaining Agreement, Article 22, between the Florida Board of Education of the State University System and Graduate Assistants United. Students with employment-related concerns should contact the GAU office at 392-0274, or Human Resource Services at 352-392- 2477. Allegations of research misconduct should be brought to the attention of the administrative officer (e.g., department chair, dean) to whom the accused party reports. Students may wish to seek advice from the Director of the Division of Research Compliance, 460 Grinter, 392-9174, before making a formal complaint. Graduate students who have complaints or problems with other aspects of university life should consult the Dean of Students Office in 202 Peabody Hall, 392-1261 for the appropriate grievance procedure.