

Fall 2025 Materials Science and Engineering Student Town Hall

Aroba Saleem, Ph.D.

Undergraduate Coordinator

Tahara Franklin, Allyson Beatty, and Nabby Rivera

Advising Office

WELCOME TO THE 2025 FALL SEMESTER



I am the undergraduate coordinator for the Department

- My duties are:
 - To be an adviser to all UF MSE undergraduate students in the MSE Department
 - To represent the interests of the undergraduate program in the Department
 - To approve transfer credits, senior research, and internship credit
 - Work with the students and faculty to improve the MSE undergraduate program
- There are various ways for you to contact me
 - Email: aroba.saleem@ufl.edu
 - MAE Building, Room 313
 - Office Hours: Wednesday 10 am 11 am, Friday 10 am 12 pm

The Academic Services Office is another great resource

- 108 Rhines Hall, (352) 846-3312
- advising@mse.ufl.edu / advisingforms@mse.ufl.edu



Tahara Franklin

Academic Advisor III



Allyson Beatty

Academic Advisor II



Nabby Rivera

Academic Assistant II



- Walk-in Hours: Monday and Tuesday from 11 am 12pm Wednesday and Thursday from 2 pm 3 pm
- Make an appointment via email, QR or phone

The College of Engineering also has great Career Services resources

- Top 4 things you should know:
- Services are available with both virtual and in person options. Schedule an appointment via Gator CareerLink: https://careerhub.ufl.edu/resources/drop-in-career-planning/.
- UF C3 Express drop-in services:
 - Hours: 1:00pm-4:00pm | Students can join anytime between 1:00-3:45pm
 - Monday, Tuesday, Wednesday, Friday In Person
 - Thursday- Virtual
- The UF Career Connection Center (C3) offers students, in all stages of their education, career options exploration, self-assessments, professional document review and critique, professional development advice and workshops, job search advice and more.
- C3 is located on the first floor of Reitz Union.

To help with emergency preparedness, pay attention to the UF Alert system





Be Gator Safe and Gator Prepared:

Visit the Department of Emergency Management to find out how:

https://emergency.ufl.edu/

- In the event of an emergency, whether a natural or man-made occurrence, UF & UFPD have preparedness plans in place
- The UF Alert is a notification system that all students are registered for. These notifications will provide them with information needed during an emergency situation or an event which needs attention for safety purposes
- Notifications are in the form of emails and/or text messages, social media, and speakers inside and outside of UF buildings
- For more information visit: ufalert.ufl.edu

The GATORSAFE mobile safety app is another great resource



Download for free



NOW



- View local crime happening around the UF Campus
- Report a crime tip to UF Police (even anonymously) attaching pictures, and video
- Trigger Mobile BlueLight to simultaneously send your location and call UFPD.
- Use the Personal Safety Toolbox which contains a Flashlight, Loud Alarm, Ability to Send Your Location and other tools.
- And more!

The Department has a Pantry that has **free snacks and sundries!**

The Pantry is located in the Advising Office (108 Rhines Hall)

Now Open DEPARTMENT PANTRY SNACKS & SUNDRIES

Grab a snack or pick up something you need. No charge.

Pantry items provided through generous donations from department supporters.

The best resource about our undergraduate program is the Undergraduate Handbook

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



Materials Science & Engineering (MSE)
Undergraduate Program Guidelines

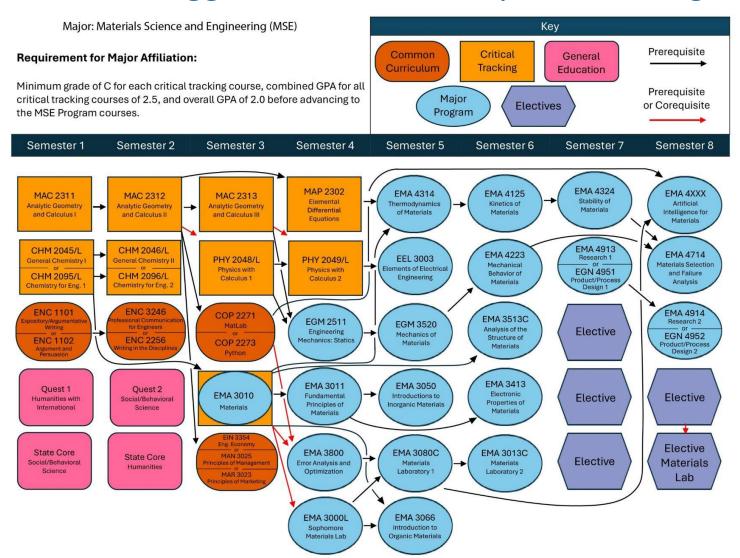
Undergraduate Handbook 2025-2026

Effective from Summer B, 2025

This Guide contains information that supplements the University's Undergraduate 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.

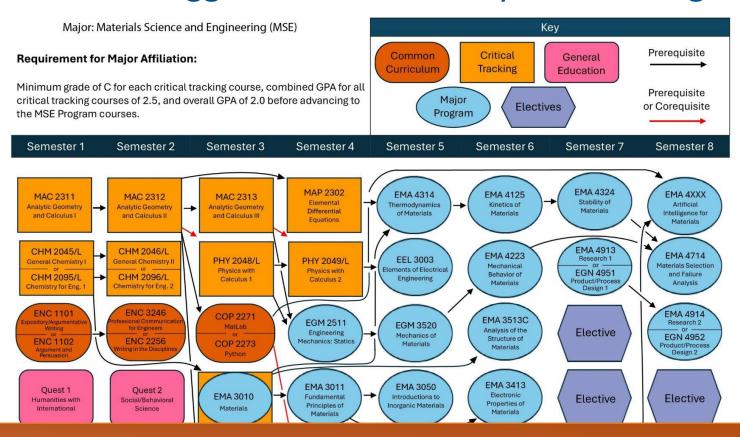


The undergraduate handbook lays out the required courses and suggested timeline for your MSE degree





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- It is your responsibility to manage your degree program to completion
- Review your degree audits right away to make sure you are on track and there won't be issues in the Spring

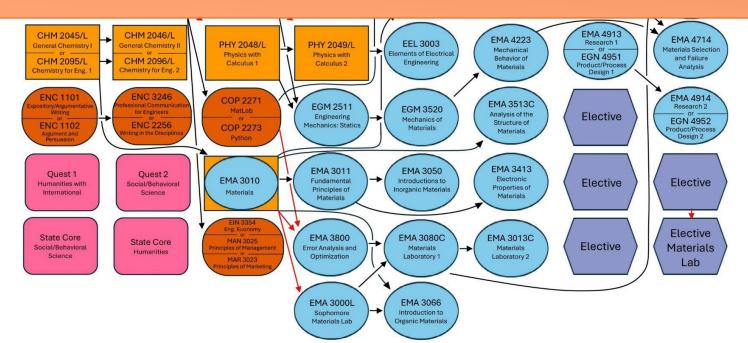


If you have issues with your schedule, talk to advising. They may recommend a **petition to request exceptions**

Petition process

- Discuss the issue with an MSE advisor to determine if a petition is needed
- 2. Fill out petition form found at https://mse.ufl.edu/academics/forms/
- 3. Email form to advisingforms@mse.ufl.edu
 Petitions about course substitutions should be submitted BEFORE the alternate

Petitions about course substitutions should be submitted BEFORE the alternate course is taken whenever possible



One elective must be a processing course

- The processing courses are:
 - EMA 4614 Production of Electronic Materials (taught in Fall)
 - EMA 4615 (taught in Spring) for the 2024-2025 academic year only
 - EMA 4062 Biopolymers: Manufacture, Stability and Biocompatibility (taught in Spring)
 - EMA 4623 Process Metallurgy (taught in Spring)
 - EMA 4645 Processing of Ceramics (taught in Spring)
 - EMA 4666 Processing of Polymers (taught in Spring)

You are allowed to take two electives from another Program

- Some are pre-approved. Any others have to be petitioned.
- Pre-approved list (in handbook):
 - BCH 4024: Introduction to Biochemistry and Molecular Biology
 - BME 4160: Magnetic biomaterials
 - BME 4648: Biomaterials for drug delivery
 - CDA 3101: Introduction to Computer Organization
 - CHM 2210: Organic Chemistry 1
 - CHM 2211: Organic Chemistry 2
 - CHM 4272: The Organic Chemistry of Polymers
 - EAS 4240: Aerospace Structural Composites 1
 - EEE 4773: Fundamentals of Machine Learning
 - EEL 3008: Physics of Electrical Engineering
 - EEL 3872: Artificial Intelligence Fundamentals
 - EGM 4592: Bio-Solid Mechanics
 - EML 2023: Computer Aided Graphics and Design
 - EML 4507: Finite Element Analysis and Design
 - EML 4930: Introduction to Biophysics for Mechanical Engineers

- EGM 3344: Introduction to Numerical Methods of Engineering Analysis
- EGN 4641: Engineering Entrepreneurship
- EGN 4643: Engineering Innovation
- EGS 4038: Engineering Leadership
- EGS 4100: Divergent Thinking
- EGS 4625: Fundamentals of Engineering Project Management
- EGS 4680: Advanced Engineering Leadership Development
- MAS 4105: Linear Algebra
- PHY4523: Statistical Physics
- PHY4604: Introductory Quantum Mechanics 1
- PHZ 4404: Introduction to Solid State Physics
- PHZ 4710: Introduction to Biological Physics
- PKG 3001: Principles of Packaging
- PKG 4011: Packaging Production & Processing

We have a program that allows you to pursue BS and MS degrees in MSE, simultaneously

- Applicants to the program must have at least 18 EMA credit hours and have an overall GPA of 3.0 or greater
 - Most students will be eligible to apply during the **Fall semester** of their junior year

Participants in the program can double count 12 EMA credits towards their BS

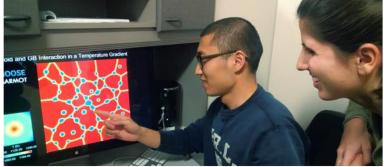
and MS degrees

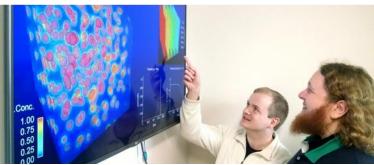
Undergraduate Requirement		Graduate Course	
EMA 3800	Error Analyses and		Error Analyses and
	Optimization Methodologies	EMA 6808	Optimization Methodologies in
	in Materials Research		Materials Research
EMA 3413	Electronic Prop. of Materials	EMA 6114	Functional Prop. of Materials
EMA 4314	Thermodynamics of Materials	EMA 6316	Materials Thermodynamics
EMA 4125	Kinetics of Materials	EMA 6136	Diffusion, Kinetics and
			Transport Phenomena
EMA 4061	Biomaterials: Structure and	EMA 6580	Science of Biomaterials
	Properties		
EMA 4062	Biopolymers: Manufacture,	EMA 6581	Polymeric Biomaterials
	Stability and Biocompatibility		
EMA 4161	Physical Properties of	EMA 6165	Polymer Physical Science
	Polymers		
EMA 4462	Polymer Characterization	EMA 6461	Polymer Characterization
EMA 4614	Production of Electronic	EMA 6616	Advanced Electronic Materials
	Materials		Processing
EMA 4615	Compound Semiconductor	EMA 6412	Synthesis and Characterization
	Materials		of Electronic Materials
EMA 4645	Processing of Ceramic	EMA 6448	Ceramic Processing
	Materials		
EMA 4623	Process Metallurgy	EMA 6625	Advanced Materials Processing

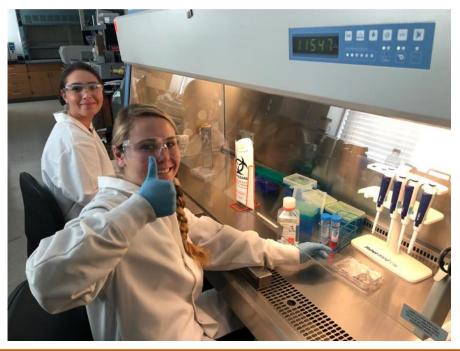


Undergraduate students are able to work in Research Laboratories on campus for EGN 4912 credit

Undergraduate research is another great way to enrich your undergraduate experience



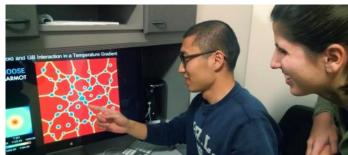




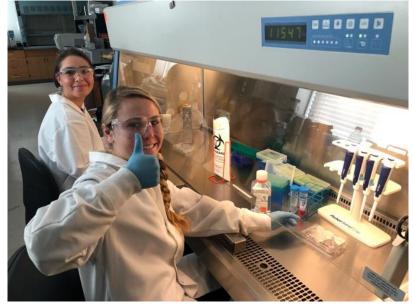
- You are required to work in a research lab in your Senior year.
- Working in a research lab now will make you more productive then.

You are each required to complete 4 credits of senior research as part of our Materials Science program

- From the undergraduate handbook: MSE students work with a research or design mentor in a scientific or engineering field. The research should lead to a technical report prepared by the end of the second semester.
 - In the Fall, you complete EMA 4913 (1 credit)
 - In the Spring, you complete EMA 4914 (3 credits)







There are two alternatives to Senior Research

- IPPD Program
 - Multidisciplinary teams of engineering and business students partner with industry sponsors to design and build authentic products and processes-on time and within budget
 - This is a University program and requires that students apply and be accepted
- Internship
 - An internship can be counted for the research portions of EMA 4913 and 4914
 - There are a number of steps you must complete, as outlined in the handbook

Participation in student societies enriches your undergraduate experience

- The MSE student societies are listed on the MSE website: https://mse.ufl.edu/about/societies/
- Materials relevant societies are:
 - Materials advantage, the primary materials student society (advisor: Dr. Victoria Miller)
 - General Contact: <u>MatAdvantageUF@gmail.com</u>
 - Society for Biomaterials (SFB): (advisor Dr. Edward Phelps (BME))
 - General Contact: uflbiomaterials@gmail.com
 - Semiconductor Career Readiness Organization at The University of Florida
 - General Contact: scrogator@gmail.com

Material Advantage Discord



Material Advantage Blacksmithing Discord



Participation in student societies enriches your undergraduate experience

- There are also a number of great Engineering student societies:
- Some specific relevant and active societies are:
 - Artificial Intelligence and Data Analytics
 - Dream Team Engineering
 - Engineering Ambassadors
 - National Society of Black Engineers
 - Out in Science, Technology, Engineering, and Mathematics
 - Society of Asian Scientists and Engineers
 - Society of Hispanic Professional Engineers
 - Society of Women Engineers
 - Polymer and Polymer Materials Science and Engineering Divisions ACS
 - Tau Beta Pi

https://www.eng.ufl.edu/undergraduate/programs-and-partnerships/center-for-experiential-learning/student-organizations/list-of-student-organizations/



Fall 2025 MSE Calendar

■ 8/27: Drop/add and late registration deadline

■ 9/5: Fee payments deadline (3:30PM)

■ 9/29 – 10/1: UF Career Showcase – O'Connell Center

■ 10/1: MSE-NE Career Fair (9:00AM – 11:30AM)

■ 11/17: Drop deadline

■ 12/3: Honors Thesis Due to ASO

■ 12/3: Last day of class

■ 12/4-5: Reading days

■ 12/6-12/12: Finals Week

Calendar: https://catalog.ufl.edu/UGRD/dates-deadlines/2025-2026/#fall25text

UF Career Showcase: https://career.ufl.edu/events-and-programs/career-fairs/career-showcase/

MSE-NE Career Fair: https://mse.ufl.edu/mse-ne-career-fair/

