



M.S. in Materials Engineering

Your gateway to cutting-edge careers in the dynamic world of materials science and technology. The cross-cutting master's program is uniquely designed to cater to the rapidly evolving landscape of enabling materials technology with transformative impacts on healthcare, national security, transportation, device technology, manufacturing, and energy sectors.

WHAT TO EXPECT

Foundations in Materials Engineering

- Develop a clear understanding of how structure, properties, processing, and performance define functional materials across energy, device, infrastructure, energetic, and biomedical applications.

Problem-Solving and Emerging Technologies

- Learn to identify and address major materials challenges while gaining training in advanced and disruptive technologies shaping the future of the field.

Research-Driven, Hands-On Learning

- Build creativity through research-aligned courses, flexible electives, and practical experience in lab or industry projects. Open to students with backgrounds in Engineering, Chemistry, Physics, or Materials Science.

Career Development and Faculty Collaboration

- Strengthen engineering skills for roles in academia, industry, national labs, and startups while working directly with faculty on real industrial projects that support career growth.

FAST FACTS



15+
Faculty
and Staff



10+
Cross-
disciplinary Labs



**Graduate
in one
Year**

This unique program fosters close student-faculty **collaboration** to help launch successful careers after graduation.

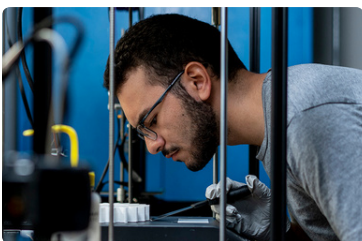
Finish your degree in as little as one year.

Eligible for students with a bachelor's degree in Engineering, Chemistry, Physics, or Materials Science.

RESEARCH AREAS

This program offers flexible, specialized research areas that prepare students for careers in advanced materials science and engineering.

- Materials Structure and Fabrication
- Materials Characterization
- Devices and Applications





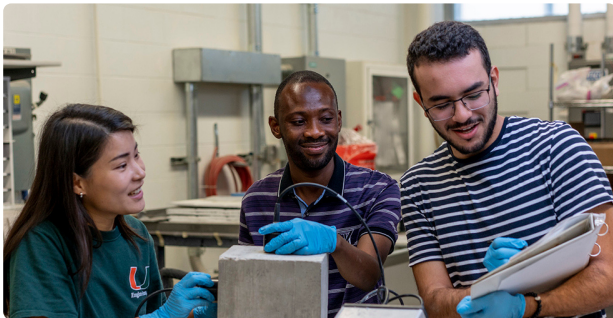
TAKE ADVANTAGE OF UNIQUE FACILITIES

Gain access to our shared facilities:

- Chemical and Materials Characterization Lab
- 3D Printing Facility of Excellence
- Engineering Innovation Studio
- Makerspace

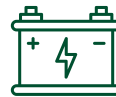
Uses include:

- Characterizing materials at nano, micro, and meso scales.
- Producing polymer and metal 3D-printed parts.
- Ideation, design, and rapid prototyping
- Woodworking, metalworking, welding, and CNC machining.
- Building and testing components for research and industry projects.



CAREER PATHS

Apply your skills across diverse sectors.



Battery Technology



Renewable Energy



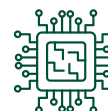
Transportation



Infrastructure



Healthcare/Biomedical



Device Technology



Defense/Aerospace

J. NEVILLE McARTHUR
ENGINEERING BUILDING

For more
information



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