

LEGACY OF EXCELLENCE. FUTURE FOCUSED.



Dr. Michele Manuel
Department Chair, Rolf
E. Hummel Professor of
Electronic Materials

The Department of Materials Science & Engineering at the University of Florida is the #1 ranked materials program in the state and one of the oldest MSE programs in the country.

The department's hands-on approach to engineering is steeped in a foundation of theoretical and science education that bridges engineering, chemistry and physics. Our goal is to educate well-rounded and successful engineers through design labs set up to identify and solve real problems facing society today.

The department is ABET-accredited and offers bachelor and graduate degrees in Materials Science and Engineering. The department also provides students an opportunity to specialize in a specified material through a certificate option. The department is also looking toward the future of engineering by expanding our nuclear materials, biomaterials, computational materials and artificial intelligence research areas.

#8

MATERIALS SCIENCE &
ENGINEERING GRADUATE
PROGRAM AMONG PUBLIC
UNIVERSITIES

#1

IN THE COUNTRY FOR THE MOST
BLACK/AFRICAN AMERICAN
FACULTY IN A MSE DEPARTMENT

#2

IN THE COUNTRY FOR MOST
FEMALE FACULTY IN A MSE
DEPARTMENT

31

NUMBER OF TENURED AND
TENURE-TRACK RESEARCH
FACULTY IN THE DEPARTMENT

Information sourced from: U.S. News & World Report; Departmental Resources; ASEE



HIGHLIGHTS



CERTIFICATES

Undergraduate and graduate students can pursue a certificate in biomaterials, ceramics, electronic materials, metals or polymers.



EQUIPMENT

Students train on industry-standard equipment such as electron microscopes, 3D printers and computational materials analysis tools.



DISTANCE LEARNING

Students can participate in the online program, EDGE to earn a master's degree from afar. The Gator Nation is and can be everywhere.

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ENDOWED
PROFESSORSHIPS

Endowed professorships result from the direct support of donors who prioritize excellence across all facets of research and higher education and allow us to attract and retain the best and the brightest faculty for our programs. In addition to honoring both the holder and donor, these titles/positions also provide an enduring funding source for research and collaboration. From early career to senior-level, these scholars excel at helping our students become the engineering industry leaders of tomorrow.

DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING RESEARCH CENTERS & INSTITUTES

- ▶ Research Service Centers (RSC)
- ▶ Center for Molecular Magnetic Quantum Materials (M2QM)
- ▶ HiPerGator (UF High Performance Computing Center)
- ▶ Center for Particulate and Surfactant Systems (CPaSS)
- ▶ Multi-functional Integrated System Technology (MIST) Center

ENERGY SOLUTIONS. POWERING TOMORROW.



Dr. Andreas Enqvist
Nuclear Engineering
Program Director

The Nuclear Engineering Program is housed within the Herbert Wertheim College of Engineering's Department of Materials Science & Engineering at the University of Florida.

The program offers students an opportunity to work on research teams related to backscatter radiography, extreme environments testing and nuclear fuel cycles. Students conduct research alongside academics and in partnership with national labs and government agencies.

The department offers ABET-accredited bachelor's degree in Nuclear Engineering and graduate degrees in Nuclear Engineering Sciences.

#12

NUCLEAR ENGINEERING
GRADUATE PROGRAM
AMONG PUBLIC
UNIVERSITIES

\$1M

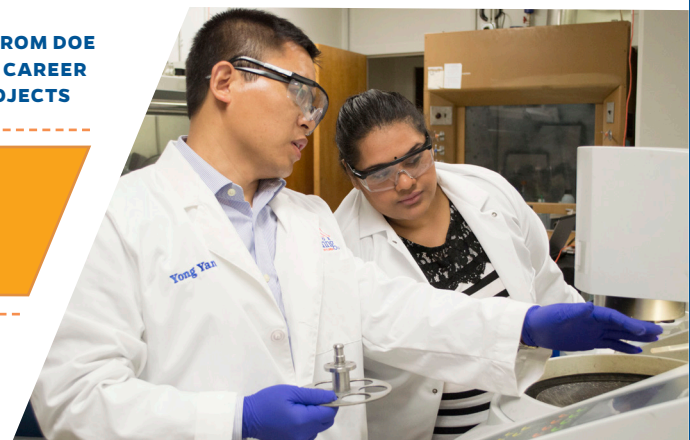
AWARDED IN FUNDING FROM DOE
AND INMM FOR 2 EARLY CAREER
FACULTY RESEARCH PROJECTS

\$6M

GRANT PROJECT
BEING CONDUCTED
WITH ARPA-E

10

NUMBER OF TENURED AND TENURE-
TRACK RESEARCH FACULTY
IN THE NE PROGRAM



Information sourced from: U.S. News & World Report; Departmental Resources; ASEE

Partnerships

Argonne National Laboratory; Idaho National Laboratory; Oak Ridge National Laboratory; Pacific Northwest National Laboratory; United States Department of Energy; United States Department of Defense; Nuclear Energy University Program

Research Areas

- ▶ Nuclear Fuels and Materials
- ▶ Radiation Detection and Imaging
- ▶ Reactor Physics
- ▶ Radiochemistry
- ▶ Fusion and Plasma Physics
- ▶ Nuclear Security and Nonproliferation

Research Facilities

The **Nuclear Engineering Program** offers hands-on experience through its research laboratories. Facilities include the UF Training Reactor, hot cell, hot-scanning electron microscope - focused ion beam tool, hot transmission electron microscopy, microstructural characterization, radiation instrumentation and mechanical testing laboratories. Below are four of our popular labs students utilize to both expand their knowledge and advance their research.

- ▶ **University of Florida Training Reactor (UFTR)**
- ▶ **Nuclear Fuels and Materials Characterization (NFMCC) Laboratory - a Nuclear Science User Facility (NSUF)**
- ▶ **HiPerGator (UF High Performance Computing Center)**
- ▶ **Laser and Optics Laboratory**