MSE Undergraduate Program

UCF’s new Bachelor of Science in Materials Science and Engineering (BS-MSE) program will be offered through UCF’s Department of Materials Science and Engineering, currently ranked in the nation’s top 50 MSE graduate programs.

Why Choose Materials Science and Engineering?

Materials are at the core of all things engineered – everything from electronics, energy sources, structures, medicines, and more. The field combines engineering, physics, and chemistry to design and manufacture high-tech materials that every other engineering discipline relies upon.

The undergraduate program at UCF is designed to meet the 21st century needs of the materials industry. It is distinguished by its wide selection of courses taught by well-trained instructors. Undergraduate students will have the opportunity to engage in high-impact research and hands-on internships through faculty mentors and local participating companies.

About the BS-MSE Program

(128 credit hours)

- Core Materials Science and Engineering courses: 38 credit hours
- GEP and Program pre-requisite courses: 62 credit hours
- Core Engineering, Elective, and Capstone courses: 28 hrs
- Minimum GPA: ≥ 2.0 in Core Engineering courses, and ≥ 2.25 in Core MSE) courses

BS-MSE Program Admission Questions

Visit mse.ucf.edu/mse-undergraduate-program

Contact

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The UCF Difference

Reputation of Excellence
Ranks as a Top 50 graduate MSE program by U.S. News and World Report Best Graduate Programs 2019. The National Research Council, part of the National Academy of Engineering and the National Academy of Science, ranked UCF among the top MSE programs in the country.

High-Impact Research
MSE/AMPAC’s research funding totaled more than $4 million in 2017-2018, to support a wide variety of topics in bioengineering, magnetics, nanotechnology, structural and energy materials, semiconductors, additive manufacturing and more.

World-Class Faculty
Students work alongside and publish with distinguished researchers who are internationally renowned for their contributions to science. They author approximately 80 refereed publications yearly. MSE has 21 core faculty, 20 program faculty and two lecturers.

Powerful Partnerships

Hands-On Learning in State-of-the-Art Centers & Facilities

Advanced Materials Processing and Analysis Center (AMPAC)
AMPAC is home to two university-wide user facilities that enable advanced research. Facilities feature ultramodern equipment for characterization and processing, and provide students training and education opportunities. Collaborations with other universities, government agencies and private industry are encouraged.

Materials Characterization Facility
The user-friendly facility occupies 7,000 square feet in UCF’s new interdisciplinary research building and is supported by three research engineers and a faculty coordinator. It houses an impressive array of materials characterization equipment.

Advanced Microfabrication & Clean Room Facility
The 3,000-square-foot space supports research activities including miniaturization, nanomaterials fabrication and applied acoustoelectronics technology. The class 100 and 1,000 clean rooms contain assorted lithography and device fabrication equipment.

MSE STUDENTS LEARN NOT ONLY THROUGH CHALLENGING COURSEWORK, BUT ALONGSIDE MENTORS IN HANDS-ON RESEARCH PROJECTS THAT OFFER REAL-WORLD EXPERIENCE THAT THEY CAN TAKE TO FUTURE JOBS AND SUCCEED.

— SUDIPTA SEAL, PH.D., CHAIR