Master of Science in Electrical Engineering

Looking for professional advancement in electrical engineering? Interested in staying abreast of fast-moving developments in communications and signal processing or digital systems engineering? At UDC’s MSEE program graduate faculty members are enthusiastic researchers and passionate teachers. You will learn state-of-the-art technology and theory and conduct research in diverse areas solving real-world problems. You will be encouraged and guided to reach your highest potential. We teach, we mentor, and we care! You succeed!

About the Program

UDC’s Master of Science program in Electrical Engineering (MSEE) is tailored to meet the needs of working professionals. The MSEE program equips students with the in-depth and interdisciplinary skills required to understand and develop new technologies and trends in electrical engineering; and to advance into professional leadership and shape the future of this dynamic field.

The program focuses on two timely and important areas of emphasis: 1) Communications and Signal Processing; and 2) Digital Systems Engineering. These two niche areas have numerous applications in national security, defense, and high-tech consumer products. There is great demand for well qualified engineers in these areas nationally and especially in the Washington Metro area.

The outstanding qualifications of the faculty coupled with their professional expertise, and the quality of their teaching and research provide graduates with a highly competitive education. In addition, small-size classes allow for close mentoring and rapid academic progress.

Faculty Members

Dr. Samuel Lakeou, Ph.D., Professor and Chair of the Electrical and Computer Engineering Department
VLSI design, SOI devices, solid state electronics, renewable energy systems

Dr. Tarak Bhar, Ph.D., Professor
Solid state electronics, radiation hardening of electronic devices and circuits, renewable energy systems.

Dr. Esther Ososanya, Ph.D., Professor
Computer architecture, embedded systems, VLSI ASIC design, nanotechnology, renewable energy systems.

Dr. Wagdy Mahmoud, Ph.D., Associate Professor and MSEE program Director
Reconfigurable computing systems, digital signal and image processing systems, and digital VLSI system design.

Dr. Paul Cotae, Ph.D., Associate Professor
Digital communications, wireless communications, information theory, statistics and applied mathematics.

Dr. Sasan Haghani, Ph.D., Assistant Professor
Wireless communications and digital communications.

Dr. Nian Zhang, Ph.D., Assistant Professor
Neural networks, fuzzy logic, adaptive critic design, and computational intelligence.
Curriculum

The MSEE program offers a wide variety of graduate courses in the two areas of emphasis. In addition, special topic courses, designed to meet the needs of high-tech companies and to give our graduates the opportunities to earn a highly marketable graduate degree are also offered. To earn the master’s degree, students must complete a minimum of 30 credit hours, including one of the following: master’s thesis, comprehensive examination, or major project report on a practical industry-type problem. For detailed course information, please refer to the program link: http://www.udc.edu/academics/soe/eecs/msee.htm

Active Grants


Admission Requirements and Instructions

- Completed application (http://www.udc.edu/admission/grad_students.htm) and application fee
- Official transcripts from each college or university attended
- A 500-word typed personal statement describing your academic/professional goals
- Recent GRE scores and three letters of reference.

Successful applicants will have an earned Bachelor’s degree in electrical engineering, computer engineering, or a closely-related field with a superior undergraduate record; will present an acceptable GRE score; and will submit three letters of reference from faculty, engineers or supervisors that certify his/her ability to succeed in the master’s program. International students from non-English speaking countries must satisfy the University requirements for English language skills, as demonstrated through TOEFL or IELTS scores.

Wagdy Mahmoud, PhD
Director, MSEE Graduate Program
MSEE@udc.edu

Samuel Lakeou, PhD
Chair, Electrical and Computer Engineering Dept.
slakeou@udc.edu

Beverly Hartline, PhD
Acting Dean, Engineering seas@udc.edu

Beverly Hartline, PhD
Dean, Graduate Studies graduate-dean@udc.edu