



MASTER'S PROGRAM IN ELECTRICAL ENGINEERING

Practical Knowledge to **Advance Your Career**

Become a leader in your engineering team by attending Mercer University's Master of Science in Engineering (MSE) in Electrical Engineering program. This unique program partners high-caliber students with award-winning faculty in a high-tech environment to create the ideal learning experience.

The program's *comprehensive course offerings* are offered in a setting which provides *unparalleled student/faculty interaction*. In addition, the program's *evening class structure* accommodates the schedules of practicing professionals in Central Georgia, making Mercer the ideal school to advance your education and your career.

AN ADVANCED DEGREE FOR THE PRACTICING PROFESSIONAL

- Attend evening courses taught once a week
- Learn from industry-experienced faculty in face-to-face class settings
- Benefit from small class sizes and a high level of interaction between students and faculty
- Collaborate with a diverse group of professionals, each bringing unique backgrounds and work experiences to the classroom

ALUMNI PERSPECTIVE

"The flexibility that is built in to the electrical engineering master's program was an important factor for me. I was able to work on my master's degree part-time, while balancing all of my other responsibilities. As an engineer, having your graduate degree enhances your marketability in the work force. I gained a broader and deeper base in terms of skills and knowledge through my coursework and that has had a direct impact on my job."

PETER BRYANT Mercer Engineering Research Center

CUSTOMIZE YOUR DEGREE

Choose from three degree pathways.

1. Delve into electrical engineering (ECE) topics with Mercer's all coursework option (30 credits ECE coursework)
2. Add value to your degree with a Software Engineering minor (21 credits ECE coursework and 9 credits software engineering coursework)
3. Contribute to the electrical engineering field through graduate research via a faculty-directed thesis (24 credits ECE coursework and 6 credits thesis)

Select a primary area of study and either one or two related areas from a broad range of current ECE topics to increase your marketability in the workforce.

- Electronic circuits
- Communication systems
- Digital computer systems
- Electromagnetics
- Digital signal processing
- Radar and electronic countermeasures
- Modern control systems

ADD IMMEDIATE VALUE TO YOUR EMPLOYER

- Gain expertise in advanced electrical engineering topics
- Apply advanced mathematics and computational tools to solve complex engineering problems
- Tailor your degree to company needs and your own professional goals
- Increase personal contributions to your engineering design team
- Take on greater leadership roles within your team and/or company

GAIN HANDS-ON PROJECT EXPERIENCE IN FOUR CUTTING-EDGE ECE LABORATORIES

- Embedded Systems/ Digital Signal Processing Lab
- Communications Lab
- EMI-Passive Detection Lab
- FPGA-Analog and Digital Fabrication Lab

BENEFIT FROM INDUSTRY-EXPERIENCED FACULTY AND DIVERSE AREAS OF EXPERTISE

- Dr. Kevin Barnett, *Digital Signal Processing*
- Dr. Aaron S. Collins, *VHDL Design and Automatic Control Systems*
- Dr. Donald U. Ekong, *Computer Networks*
- Dr. Jeng-Nan Juang, *Microwaves and Electromagnetic Theory*
- Dr. Behnam Kamali, *Digital Communications and Coding Theory*
- Dr. Paul E. MacNeil, *Software Engineering*
- Dr. Doug Moody, *Radar and Electronic Countermeasures*
- Dr. Philip D. Olivier, *Control Systems, Robotics, and Fuzzy Logic*
- Dr. Clayton R. Paul, *Electromagnetic Compatibility and Electromagnetics*
- Dr. John Reece, *Computer Architecture and VHDL Design*

ALUMNI PERSPECTIVE

"Mercer's graduate program in electrical engineering gave me the necessary skills to pursue and land rewarding electrical design positions for some of the world's leading technology companies. It prepared me to perform cutting-edge electronic design tasks and enabled me to further develop my design skills in the workplace."

PHILLIP WARREN 3SI Security Systems

FACULTY SPOTLIGHTS

DR. BEHNAM KAMALI

- Internationally known expert in the theory and practice of Reed-Solomon codes
- Author of more than fifty publications
- Four-time NASA Summer Research Fellow at the Jet Propulsion Laboratory (JPL) and Glenn Research Center (GRC)
- Actively involved in space and aerospace communications research

DR. PHILIP OLIVIER

- Active researcher in systems and automatic control engineering
- Author of more than fifty publications
- Funded by NASA and the US Air Force for research on the automatic alignment of large space based telescopes
- Directs Mercer's participation in the NASA funded Georgia Space Grant Consortium

DR. CLAYTON PAUL

- Recognized as IEEE Fellow and recipient of the worldwide 2005 Electromagnetics Award
- Awarded prestigious IEEE Third Millennium Medal
- Holder of Sam Nunn Eminent Scholar of Aerospace Engineering Chair
- Authored eleven widely used college textbooks



SCHOOL OF ENGINEERING

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