Electrical Engineering (M.S.)

Master of Science
http://ece.gmu.edu
Phone: 703-993-1569, ece@gmu.edu

Program Overview
Mason Engineering offers a Master of Science in Electrical Engineering through its Department of Electrical and Computer Engineering. The MS in Electrical Engineering Program boasts outstanding programs in an array of advanced and cutting-edge areas, such as bioengineering, communications and networks, signal processing, control and robotics, microelectronics and electromagnetics/microwaves, and system design.

The Department of Electrical and Computer Engineering has an outstanding faculty of 25 full-time professors, six of whom are fellows of IEEE or other professional societies. The department offers more than 50 graduate-level courses in the areas of electrical and computer engineering. The program regularly consults with regional area employers to provide input on field trends, which leads to the offering of special topics courses designed to give our students an opportunity to earn a degree that is highly relevant in today’s environment.

Program Requirements
The MS in Electrical Engineering requires a minimum of 30 graduate-level credits with a thesis, project, or non-thesis/project option. This work must represent a cohesive set of courses leading to comprehensive knowledge in one specialization area.

Core course options include two of the following:
- Linear Systems and Control
- Neural Engineering or Learning from Data
- Introduction to Random Processes in Electrical and Computer Engineering
- Sequential Machine Theory or Computer Architecture
- Semiconductor Device Fundamentals or Introduction to Optical Electronics

Students then take 6 graduate seminars and 9 upper level courses from the large array of course offerings in bioengineering, communications and networks, signal processing, control and robotics, microelectronics and electromagnetics/microwaves, information technology, architecture-based systems integration, and telecommunications. Students may also take up to two courses offered by other programs within the Volgenau School or the university with permission.

To complete the program, students may select a thesis option with 6 credits of thesis and 24 credits of coursework, or alternately 30 credits of coursework and a scholarly paper.

Refer to our website for more information on program course offerings and details on program requirements: https://ece.gmu.edu/graduate-studies/masters-programs/ms-electrical-engineering.

Related Programs:
- Computer Engineering, MS
- Digital Forensics and Cyber Analysis, MS
- Electrical and Computer Engineering, PhD
- Telecommunications, MS
Electrical Engineering (M.S.)

Distance Education courses may be available for select programs. Graduate Certificate degree programs may also be offered. Please visit our website for details.

Admission Requirements
In addition to meeting general university admissions requirements, applicants must have completed a baccalaureate degree in electrical engineering, computer engineering, or a closely related discipline from an accredited program with a reputation for high academic standards, with an average GPA of 3.00 or better over their 60 highest-level credits.

Required application materials include:
• Online application and non-refundable fee
• Transcripts showing all post-secondary study
• Professional and Educational Goals Statement
• Two letters of recommendation from professors or senior officials at place of employment
• GRE scores (for applicants who have not earned at least a Bachelor's degree from a U.S. institution)
• Resume

Additional application materials, including English proficiency examination scores (e.g., TOEFL, IELTS), are required if the applicant holds a degree from an international institution and/or requires an F-1 or J-1 visa. Visit http://admissions.gmu.edu/grad for details.

Special admission programs are available for Volgenau School students and alumni.

Visit our website for details: https://volgenau.gmu.edu/academics/graduate-programs
Apply online: http://admissions.gmu.edu/grad/applynow