

Master of Science in Electrical Engineering

INTRODUCTION

Electrical and computer engineers are in high demand by all types of industries, businesses, and government agencies, and are among the highest paid professionals. A Master of Science in Electrical Engineering (MSEE) from Cleveland State provides a deeper, more general, and more fundamental understanding of the principles in the fields of electrical and computer engineering as well as a familiarity with advanced methods and tools of analysis and synthesis that are powerful and generally applicable in the design, development, and operation of new high-tech products.

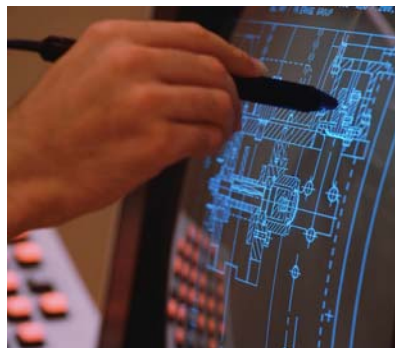
PROGRAM DESCRIPTION

Electrical and computer engineering is a very broad discipline, including computers, computer networks, Internet, security, digital systems, power electronics and power systems, control systems, mobile and wireless communications, digital signal and image processing, and more. The MSEE program prepares students for careers in the fields by providing them with balanced emphasis on both theory and practice, which is highly valued by employers. The laboratories are well equipped and the facilities are state-of-the-art due to the continuous reinvestment of funds for equipment replacement and establishment of many new laboratories in recent years.

The program includes required courses and an integrated selection of courses in the student's field of

interest. The following areas of specialization are offered for graduate study and research: Communication Systems, Computer Systems, Control Systems, Power Electronics and Power Systems.

Our students often have the opportunity to work on real problems in industry, in academic research, and at NASA Glenn Research Center. MSEE graduates are frequently hired by prominent companies and government agencies such as Rockwell Automation, GE, Motorola, Microsoft, ABB, Qualcomm, and NASA.



RESEARCH:

All full-time faculty members hold Ph.D. degrees and have extensive experience in the field. Their areas of expertise include traditional areas of electrical engineering such as communications, power electronics and power systems, and control systems as well as emerging areas such as computer engineering, software engineering, MEMS (Micro-Electro-Mechanical Systems), and sensors. In addition to its nine research laboratories, the faculty in the MSEE program play major roles

as both leaders and researchers in the college-wide Center for Research in Electronics and Aerospace Technology (CREATE), as well as in the state-funded multi-university and multi-business \$23 million-dollar Wright Center for Sensor Systems Engineering. Recent external funding for our faculty's research includes NSF (National Science Foundation) Career Award (Improving the Productivity of the Sensor Network Programmer) and NSF CCLI Award (Building a Novel Power Electronics and Electric Machines Laboratory).

DEGREE REQUIREMENT

The MSEE degree program has two options: non-thesis option and thesis option. The non-thesis option requires completion of 16 credit hours of courses in an area of specialization and 16 credit hours of elective courses, which allow students to customize the program. The thesis option requires completion of 16 credit hours of courses in an area of specialization, 8 credit hours of elective courses, and 6 credit hours of thesis.

For admission information contact:

Cleveland State University
Graduate Admissions Office
2121 Euclid Ave.

Cleveland, OH 44115
(216) 687-5599

www.csuohio.edu/gradcollege/

For program information, contact:

Department of Electrical and
Computer Engineering
Stilwell Hall, Room SH 332
(216) 687-2591

<http://www.csuohio.edu/ece/>