Concentration in Electrical & Computer Engineering

Home Department: Electrical & Computer Engineering (ECE)
Available: On-campus and Off-campus

The Master of Science degree in Engineering with concentration in Electrical & Computer Engineering is designed for individuals who wish to acquire a deeper understanding and applied knowledge of engineering principles. This program affords a possibility for students to specialize in modern applications of electronics, electrical systems, and computer networking.

In addition, the program provides an opportunity to learn business and financial management concepts which are valuable to practicing engineers. This program has a thesis option.

Program Requirements

- Modeling of Dynamic Systems (ECE-610)
- Two non-engineering courses from approved list
- One free elective (600-level course)
- Six Electrical Engineering courses
- The electives must be chosen so that at least six of the courses are 600-level.

The Curriculum for Electrical & Computer Engineering (Ten 4-credit courses)

The following course is required:

ECE-610	Modeling of Dynamic Systems

Two of the following non-engineering courses must be chosen. Another course, which is a 600-level course, may be chosen as a free elective:

BUSN-659	International Business
ECON-513	Micro/Macro Economic Concepts & Applications
FINC-619	Financial Management

A student may opt to do an MS thesis for four credits in lieu of a 600-level ECE course.

At least six of the following courses must be chosen. Another course may be taken as a free elective.

EE-520	Electronic Circuits & Systems
EE-524	Fuel Cell System Integration and Packaging
EE-530	Digital Control Systems
EE-580	Automotive Electronic Systems
EE-582	Robot Dynamics and Control
EE-584	Wireless Communications for Automotive Applications
ECE-630	Advanced Digital Signal Processing
ECE-642	Electric Machine Drives
ECE-648	Electromagnetic Compatibility
ECE-682	Mobile and Wireless Computing

For more information on this program, please contact Dr. Ravi Warrier at 810-762-7847 or kravi@kettering.edu.