MASTER OF ENGINEERING (GENERAL)

Home Department: Graduate School

Available: Off Campus Only

Program Advisor/Contact:

Dean of the Graduate School & Sponsored Research
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Program Overview

The Master of Engineering (General) degree is designed for engineering professionals working in the mobility (automotive) industry. Students can broaden their skill set for subjects including Autonomous Vehicles, Electric Vehicles and Artificial Intelligence. All students must complete two mobility systems fundamentals courses (which two depend on your undergraduate degree), courses on automotive controls and signal processing, two management courses, and four technical courses.

Program Objectives

All graduates of the Master of Engineering (General) program will:

- Deepen their knowledge and increase their mastery of technical areas in modern automotive system design and development.

- Be better prepared to advance in positions of technical and/or managerial leadership.

- Develop their ability to sustain a life-long career in engineering, through continuing self-directed learning and professional development activities.

To receive the Master of Engineering (General) degree a student must complete 30 credit hours of approved graduate work. There is no option for thesis work.

Professional Development Seminars

Students in the professionally-oriented Master of Engineering General program may receive credit for taking seminars either through Kettering University's Professional Development Program or SAE International's Professional Development Program.

To receive credit students must complete a total of four Continuing Education Units (CEU), equivalent to 40 hours of instruction, which have been reviewed and approved by a faculty review committee, consistent with Graduate academic policy.

The transfer of credit must be supported by documentation from the provider for each individual applicant seeking such transfer.

Graduate Assistantship

There are no opportunities for graduate assistant positions in the M. Eng. Program.

Program of Study (Total Credit Hours: 30)

Required Courses

Automotive Fundamentals (Students with an undergraduate degree in engineering take the two courses outside of their undergraduate major. Students without an undergraduate engineering degree take all three.)

MENG-6013 Electrical and Computer Engineering Principles for Mobility Systems
MENG-6023 Industrial and Manufacturing Engineering Principles for Mobility Systems
MENG-6033 Mechanical Engineering Principles for Mobility Systems

Engineering Courses

MENG-6303 Digital Signal Processing Techniques for Automotive Engineering
MENG-6323 Automotive Control Systems

Management Courses

MENG-6093 Technology Management
MENG-6193 Project Management

Electives (Select Four)

MENG-6423 Mobile Robotics
MENG-6523 AI for Autonomous Driving
MENG-6543 Computer Vision for Autonomous Driving
MENG-6843 Internet of Things (IoT)
MENG-6213 Energy Storage Sys w/ EV App
MENG-6263 Advanced Power Electronics for Vehicle Electrification
MENG-6463 Vector Control of AC Electric Machines
MENG-6453 Electrified Vehicle Propulsion
MENG-6823 Machine Learning
MENG-6813 Artificial Intelligence
MENG-6523 AI for Autonomous Driving
MENG-6653 Information Retrieval & Data Mining
MENG-6953 Mobility Systems Seminar I
MENG-6963 Mobility Systems Seminar II