# MASTER OF ENGINEERING IN AUTONOMOUS VEHICLES

Home Department: Graduate School

Available: Off Campus Only

Program Advisor/Contact:

Dean of the Graduate School & Sponsored Research 4-321 CC, 810-762-9711, gsr@kettering.edu

## **Program Overview**

The Master of Engineering in Autonomous Vehicles program is designed for engineering professionals working in the mobility (automotive) industry. Students can broaden their skill set for careers in Autonomous Vehicle design and development. 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 specifically in Autonomous Vehicles.

# **Program Objectives**

All graduates of the Master of Engineering in Autonomous Vehicles program will:

- Deepen their knowledge and increase their mastery of technical areas in Autonomous Vehicle 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 MEng Autonomous Vehicle degree a student must complete 30 credit hours of approved graduate work. There is no option for thesis work.

## **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

#### **Autonomous Vehicle Core**

MENG-6423 Mobile Robotics

MENG-6523 Al for Autonomous Driving

MENG-6543 Computer Vision for Autonomous Driving

MENG-6843 Internet of Things (IoT)