

MS IN ENGINEERING (CONCENTRATION IN COMPUTER ENGINEERING)

Home Department: Electrical and Computer Engineering (<https://my.kettering.edu/academics/departments/electrical-computer-engineering>)

Available: On Campus Only

Program Advisor/Contact:

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Program Overview

The Master of Science in Engineering (<https://my.kettering.edu/academics/departments/graduate-programs/graduate-degrees/master-science-engineering>) is a professional master's program that builds on an undergraduate engineering program by offering additional depth and greater mastery in a number of technical areas.

Program Objectives

All graduates of the Master of Science in Engineering program will:

- Deepen their knowledge and increase their mastery of technical areas that match their personal career goals.
- 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.

The Computer Engineering (<https://my.kettering.edu/academics/departments/graduate-programs/graduate-degrees/master-science-engineering/mse-computer>) concentration is a research-intensive on-campus program designed for individuals who wish to deepen their understanding of computer engineering principles and applications and to develop their skills in independent research.

Graduate Assistantship

Financial support, in the form of tuition reductions or waivers and stipends for living expenses, is available on a competitive basis. Students who receive financial support may be required to serve as research or teaching assistants for up to 20 hours per week (depending on the level of financial support) during terms in which they are registered.

Program Curriculum Requirements

Completion of 40 credits as follows:

Select four of the following: 16

CE-612	Digital Systems Design
CE-620	Microcomputer Systems
CE-622	Computer Architecture and Organization
CE-624	VLSI Design
CE-626	Real-Time Embedded Systems

CE-630	Logic Systems	
CE-642	Mobile Robotics	
CE-670	Haptic Systems	
CE-680	Computer Networks	
CE-682	Computer Embedded Systems	
CE-691	Computer Engineering Special Topics	
CE-699	Computer Engineering Independent Study	
Any 500-600 graduate level elective courses		8
CE-695	Graduate Research in Computer Engineering (two, 8 credit courses)	16
Completion and successful defense of a master's thesis		
Total Credit Hours		40

Undergraduate level coursework might also be required for some students as a prerequisite for either graduate-level coursework or research, depending on the student's background and the nature of the coursework or research. If required, undergraduate-level credit cannot be used to satisfy the graduate-level credit requirements given above.

The program operates on a calendar similar to a conventional quarter system: Fall, Winter, and Spring terms are 'regular' academic terms during which students normally enroll full-time, and the Summer term is optional. The nominal place of student calls for a total of six terms of study over 21 months.

First Year	Fall	8 credits coursework
First Year	Winter	8 credits coursework
First Year	Spring	8 credits coursework
	Summer	
Second Year	Fall	8 credits coursework
Second Year	Winter	8 credits coursework
Second Year	Spring	Thesis defense and submission

Many variations of this plan are possible. In particular, students may begin the program in any term, not just Fall, and may elect to register for coursework or research during Summer. Students may not, however, register for more than eight credits in a term.