

CMPE-MS

Graduate Track/Specialty Area

Name of Track: <u>Real-Time Systems</u>
Faculty Member(s) using track: <u>Krishna Kavi, Phil Sweany, Song Fu, Robert Akl</u>

Required Courses for Real-Time Systems Track: 9 credits (must include the core course 5640)

Course Number	Course Name	Credits	Semester Taken
CSC 5440	Real-Time Software Development	3	
CSC 5620	Real-Time Operating Systems	3	
CSC 5640	Operating System Design (core course)	3	
CSC 6620	Advanced Real-Time Operating Systems	3	

Track Core Courses: Each track will require a minimum of 9 credits to be chosen from a list of at least 3 courses. This list may include specific courses that students must take, provide a choice between a short list of courses, or any combination thereof. To qualify for the master's degree, a student must earn a grade of "B" or better in each of the core and required courses.

Core Courses Required: <u>2</u>
--

Course Number	Course Name	Credits	Semester Taken
CSC 5510	Wireless Communications (core course)	3	
CSC 5580	Computer Networks (core course)	3	
CSC 5610	Computer System Architecture (core course)	3	
CSC 5730	Digital CMOS VLSI Design (core course)	3	

Track Supporting Courses: Tracks are expected to provide a list of supporting courses. Tracks may require a student to take courses from the supplemental list based on the following:

- for thesis option: The maximum number of required courses across the track (**core and supporting**) should not exceed 21 credits (not including thesis). For MS with thesis, the total number of hours required is 30. This leaves a minimum of 3 credit hours free for the student to choose.
- for course option: The maximum number of required courses across the track (**core and supporting**) should not exceed 21 credits. For MS without thesis, the total number of hours required is 36. This leaves a minimum of 15 credit hours free for the student to choose.
- Only one CSCE 5934 Directed Study course is permitted and CSCE 5932 Internship course may not be included on the degree plan. To continue in good standing, a student must maintain a 3.0 GPA overall.

Supporting Courses Required: <u>2/2</u> (may include core courses not selected)
--

Course Number	Course Name	Credits	Semester Taken
CSC 5160	Parallel Processing and Algorithms	3	
CSC 5450	Programming Languages	3	
CSC 5520	Wireless Networks and Protocols	3	
CSC 5530	Computer Network Design	3	
CSC 5540	Introduction to Sensor Networks	3	
CSC 5650	Compiler Design	3	
CSC 5740	Modern Electronic System Design	3	
CSC 5760	Design for Fault Tolerance	3	
CSC 5910	Special Problems	3	
CSC 5934	Directed Study	3	
CSC 6590	Advanced Topics in Wireless Communications and Networks	3	
CSC 6610	Advanced Computer Architecture	3	
CSC 6640	Advanced Operating Systems	3	
CSC 6731	Advanced Topics in VLSI Systems	3	

Total Required Courses for Track/Specialty Area: <u>7/7</u>
--