## MSEE Curriculum Chart (Thesis/Project/Coursework) EE/CpE/SE Tracks

1st Semester 2nd Semester 3rd Semester 4th Semester EE 5XX (3) EE 5XX (3) / SE6XX EE 5XX (3) / SE 6XX EE 5XX (3) Core Course\* Core Course Core Course Graduate Course (Tech Elective) EE 5XX (3) EE 5XX (3) EE 5XX (3) EE 5XX (3) Graduate Course (Tech Elective)\*\* Graduate Course (Tech Elective) Graduate Course / Thesis Graduate Course / Thesis\*\*\* EE 5XX (3) EE 5XX (3) Graduate Course (Tech Elective) Graduate Course (Tech Elective)

\*Core Course: Any one of the courses (non-dual-listed or pure graduate) listed under each track below. Students are required to take four non-dual-listed graduate courses, at least three of which must be from a track listed below.

\*\*Graduate Course/Tech Elective: Students can select these courses from any listed in the ECE Bulletin (if offered in a given semester)

Minimum 6 cr hrs of non-dual-listed courses are required for Thesis students. Minimum 12 cr hrs of non-dual-listed courses are required for course-only students.

## Core Courses by Track

EE Track Courses	CpE Track Courses	SE Track Courses
EE 530: Nanotechnology	EE 530: Nanotechnology	SE 601: Systems Eng. Fundamentals (must take)
EE 534: VLSI Design Systems	EE 534: VLSI Design Systems	SE 602: Risk & Failure Analysis (must take)
EE 560: Adv. Computer Arch.	EE 560: Adv. Computer Arch.	EE 590: SpTp: Comp. Sci/Eng
EE 566: Digital Image Processing	EE 566: Digital Image Processing	EE 566: Digital Image Processing
EE 590: SpTp: Comp. Sci/Eng	EE 590: SpTp: Comp. Sci/Eng	EE 560: Adv. Computer Arch.

Maximum 6 credit hours from OD will be counted towards the degree			
1: Computer and Information Science:	4: Mathematics		
CIS 535: Digital Forensic Analysis	MA 537: Complex Analysis		
	MA 565: Numerical Analysis		
2: Computer Science	MA 567: Operations Research		
CSC 513: Computer Graphics	MA 571: Ordinary Differential Equations		
CSC 514: Modeling and Simulation	MA 572: Partial Differential Equations		
CSC 516: Artificial Intelligence Theory and Programing	MA 581: Cryptography		
CSC 517: Computer Game Development			
CSC 522: Performance Evaluation of Algorithms	5: Systems Engineering		
CSC 526: Data Mining	SE 601: Systems Engineering Fundamentals		
CSC 533: Artificial Intelligence and Heuristic Programing	SE 602: Risk & Failure Analysis		
	SE 603: Integration, Testing and Evaluation		
3: Mechanical/Biomedical Engineering	SE 605: Project Engineering		
ME 538: Finite Element Analysis	SE 609: Engineering Research Methods		
BME 567: Principles of Biomedical Engineering			

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<sup>\*\*\*</sup>Thesis: Students who are in the Thesis option MSEE program are required to complete at least 6 hours of Thesis credits, regardless of how long it takes to complete the associated research.