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

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

***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.

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.

The following courses from other disciplines (OD) are available and counted as Tech Elective courses

Maximum 6 credit hours from OD will be counted towards the degree

1: Computer and Information Science:
CIS 535: Digital Forensic Analysis

2: Computer Science
CSC 513: Computer Graphics
CSC 514: Modeling and Simulation
CSC 516: Artificial Intelligence Theory and Programing
CSC 517: Computer Game Development
CSC 522: Performance Evaluation of Algorithms
CSC 526: Data Mining
CSC 533: Artificial Intelligence and Heuristic Programing

3: Mechanical/Biomedical Engineering
ME 538: Finite Element Analysis
BME 567: Principles of Biomedical Engineering

4: Mathematics
MA 537: Complex Analysis
MA 565: Numerical Analysis
MA 567: Operations Research
MA 571: Ordinary Differential Equations
MA 572: Partial Differential Equations
MA 581: Cryptography

5: Systems Engineering
SE 601: Systems Engineering Fundamentals
SE 602: Risk & Failure Analysis
SE 603: Integration, Testing and Evaluation
SE 605: Project Engineering
SE 609: Engineering Research Methods

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