Master of Science in Computer Engineering  
Degree Plan  

Name: ____________________________________  Student number: __________________

A graduate student admitted into the Master’s Degree in Computer Engineering must submit this degree plan by the midterm of their first semester to their academic advisor. Five-year students must submit the degree plan with their 5-year program application. The academic advisor must approve and sign this form prior to submission. Changes to your degree plan can be made by submitting an updated form, approved by the academic advisor or the thesis advisor (for thesis students).

Please refer to the course requirements on the next page and list below: the required, area, elective, and thesis courses in the order in which you plan to take them, making note of prerequisites.

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<tr>
<th>Semester</th>
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<th>Course</th>
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</table>

Total number of courses: ____________________________

☐ Thesis option must be at least 3 3 1 3
☐ Non-thesis option must be at least 3 3 4

Advisor signature: __________________________________________ Date: ________________________________

**Abbreviations:**
- F  Fall semester  
- S  Spring semester  
- M  Summer semester  
- R  Required core course requirement  
- A  Area course requirement  
- E  Electives  
- IT  Independent study and Theses
Master of Science in Computer Engineering
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Requirements:

Ten courses total, including the three core courses, three area courses, and four electives. For the thesis option, electives must include the Independent Study and Research I & II courses.

Required Core Courses

ECE 7428 - Computer Communication Networks
ECE 8448 - Embedded Systems Architecture
ECE 8473 - Unix and C Programming

Area Courses (Choose at least 3)

ECE 8405 - Computer Organ & Design
ECE 8408 - Mob Computing & Wireless Net
ECE 8410 - Trusted Computing
ECE 8415 - Cyber-Physical Systems
ECE 8420 - High-Performance Computing
ECE 8440 - Hardware Sys Des & Modeling
ECE 8455 - Adv. Digital Des. Using FPGAs
ECE 8460 - VLSI Design
ECE 8490 - Theory and Practice of Computing Applications

Electives

Any course from the area courses above may also count as an elective. At least two of the electives must be ECE courses. Courses not listed here may count as electives with approval of the advisor.

ECE 8007 - Matrix Theory
ECE 8231 - Digital Signal Processing
ECE 8476 - Cryptography & Network Security
ECE 8484 - Cybersecurity Threats and Defense
ECE 8485 - Critical Infrastructure Control Systems Security
ECE 8486 - Ethical Hacking
CSC 8301 - Design & Analysis of Algorithms
CSC 8470 - Computer Graphics
CSC 8490 - Database Systems
CSC 8580 - Network Management & Performance
CSC 8610 - Multimedia Technology
CSC 9010 - Special Topics (with approval of the advisor)
MAT 7770 - Number Theory
MAT 8435 - Mathematical Modeling

ECE 9030 - Independent Study
ECE 9031 - Research I (thesis option)
ECE 9032 - Research II (thesis option)
ECE 9090 - ECE Project