MST, Computer Architecture & Systems (CAS), Parallel/Distributed computing emphasis

MASTER of SCIENCE GRADUATE PLAN OF WORK PROPOSED

On this page list your proposed program in chronological order. Be sure to show a total of at least 30 hours.

ECE COURSES 21 hours coursework required, maximum 6 hours 695				
Course Prefix/Number (Specialty) * elective (may substitute other)	**Major Track (EE, CPE)**	**Credits**	**Semester**	**Grade**
ECE 517 (SW)	CPE	3	Fall 1	
ECE 521 (CA)	CPE	3	Fall 1	
ECE 506 (CA)	CPE	3	Fall 1	
ECE 748 (CA)	CPE	3	Spring 1	
ECE 561	CPE	3	Spring 1	
ECE 721 (CA)	CPE	3	Fall 2	
ECE 695	(CPE)	3	Fall 2	
*ECE 566 (SW)	CPE	3	Fall 2	
ECE 695		3	Spring 2	

NON-ECE Courses				
Course Prefix/Number (Topic)	**Minor**	**Credits**	**Semester**	**Grade**
CSC 510	CPE	3	Spring 1	

entered: _____   submitted: _____

Master of Science
GRADUATE PLAN OF WORK Requirements

1. The MS degree requires at least 30 credit hours. The MS program requires both breadth and depth.

    Check: POW has 24 credits of courses, 6 credits of 695.

2. Breadth is obtained by at least one course from each of three (3) specialty areas – **circle courses taken in list below**.

    Check: (1) CA (e.g., 506), (2) SW (566), (3) VLSI (e.g., 546).

3. Depth is achieved by taking at least two 700 level courses from the major track (EE or CPE) specialties from the list below – **circle courses taken in list below**.

    Check: CPE (721, 748).

4. The major, EE or CPE, is obtained by taking **six (6)** courses from major track from the entire list of courses in ECE. Three hours of thesis can be credited as one course in the major. Only one course in the major track is subject to this substitution.

    Check: CPE – 7 courses (plus 695 if needed).

5. The student must take 21 hours of ECE courses, 18 hours must be graded, i.e., only one S/U course allowed, (ECE633,634, 682), exclusive of ECE695. ECE695 cannot be used for credit by non-thesis students.

    Check: POW has 27 ECE credits, 21 of which are graded.

6. Maximum six(6) hours of ECE695 is allowed for MST students – an MST student may have up to nine hours of S/U, e.g., 6 hours ECE695 + 3 hours ECE633.

    Check: POW has 6 hours of 695.

7. Up to nine hours of graduate-level (500,700) courses outside of ECE may be taken. At most one senior-level (400) course may be included in these nine hours. These courses must be part of a unified plan of study for an advanced ECE degree. These courses should be taken with prior approval of the director of graduate programs or the ECE Graduate Studies Committee.
    (As a guideline, note that the common graduate-level, technical courses in CSC, MA, STAT, PHYS, CH, or any engineering department are acceptable. BUS courses that are listed for the CNE program are acceptable. Substitutions for BUS courses require prior approval. It is wise to check with the graduate office before taking courses outside of the above mentioned areas.)

    Check: POW includes 3 hours of pre-approved CSC courses at 500/700 level (591C).

8. Examples for plans of work for various areas can be found at (URL)

Specialty	Course Numbers
Computer Architecture (CPE)	ECE506, ECE 521, ECE 560, ECE 721, ECE 743, ECE 547, ECE 748
Software (CPE)	ECE 517, ECE 566
VLSI Systems (CPE)	ECE 520, ECE546, ECE 704, ECE 741, ECE761
Networking(CPE)	ECE 570, ECE 576, ECE 776, ECE 777
Circuits (EE)	ECE 511, ECE718, ECE 733
Microwave Circuits and Applied Electromagnetics (EE)	ECE 540, ECE549, ECE719, ECE732
Communications (EE)	ECE515, ECE582, ECE 751, ECE 762
Signal Processing and Computational Intelligence (EE)	ECE 513, ECE742, ECE559, ECE763
Robotics, Mechatronics & Instrumentation (EE)	ECE554, ECE754, ECE592R , ECE525
Power Engineering and Control (EE)	ECE 516, ECE 726, ECE550, ECE753
Nanoelectronics and Photonics (EE)	ECE523, ECE530*, ECE538, ECE557, ECE722, ECE723, ECE724 * Required for students majoring in nanoelectronics and photonics.