

**PhD
GRADUATE PLAN OF WORK Requirements**

1. Your plan must show 72 hours past BS degree
 - a) 30 hours credit can be from MS from NCSU (continuous registration required)
 - b) 18 hours credit can be from MS from other university
 - c) you may use as many hours of ECE895 (dissertation research) as you wish.
2. One course from each of 3 specialty areas within ECE (see table below) – these can come from the NCSU MS program

Course	Specialty Area	Grade (B+ or better)

3. Three (3) courses from outside of major area. A major area is either EE or CPE. Courses that are cross-listed in EE/CPE or with other departments cannot be used as outside the major area. Courses taken during the MS cannot be used to satisfy this requirement.

Course	Major Area or Department

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 (neural nets), ECE559(Pattern recognition), ECE763(computer vision)
Robotics, Mechatronics & Instrumentation (EE)	ECE554(robotics), ECE754(advanced robotics) ECE592R (Mechatronics), ECE525 (Medical Instrumentation)
Power Engineering and Control (EE)	ECE 516, ECE 726, ECE550, ECE753
Nanoelectronics and Photonics (EE)	ECE523(Opt Comm Dev), ECE 530*, ECE538, ECE557, ECE 722, ECE 723, ECE 724 * Required for students majoring in nanoelectronics and photonics.

