

**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

ECE Specialty Areas	
Specialty	Course Numbers
Computer Architecture (CPE)	ECE506 (FS), ECE521(FS), ECE561(S), ECE705 (V), ECE706(F), ECE721(FO), ECE743(V), ECE747(S), ECE785(F), ECE786(S)
Software (CPE)	ECE 517(F), ECE 566(S)
VLSI Systems (CPE)	ECE 520(S), ECE544(S), ECE546(F), ECE720(S) ECE745(F), ECE 746(V), ECE761(S)
Networking(CPE)	ECE 570(FS), ECE573(FS), ECE574(FS), ECE575(S), ECE 576(FS), ECE579(FS), ECE772(S), ECE773(S), ECE774(S), ECE775(F), ECE 776(S), ECE 777(F), ECE779(S)
Circuits (EE)	ECE 511(F), ECE 712(S), ECE718(S), ECE 733(S)
Microwave Circuits and Applied Electromagnetics (EE)	ECE 532(S), ECE 540(S), ECE549(F), ECE719(F), ECE732(S)
Communications (EE)	ECE515(S), ECE582 (F), ECE 751(S), ECE752(SO), ECE762(F), ECE766(S), ECE767(SE), ECE778(F)
Signal Processing and Computational Intelligence (EE)	ECE 513(F), ECE 558(F), ECE559(SE), ECE742 (S), ECE 759(SE), ECE763(F), ECE 764(F), ECE 765(S)
Robotics, Mechatronics, Control & Instrumentation (EE)	ECE 516(S), ECE522(F), ECE 536(F), ECE555(S), ECE556(F), ECE 726(V), ECE755(F), ECE 756(S)
Power Electronics and Power Systems (EE)	ECE 534(F), ECE 553(S), ECE734 (F), ECE 736(F), ECE550(FE), ECE753(SE), ECE792P* (SO), ECE792S*(SE) * these course may count as advanced, pending CAF
Nanoelectronics and Photonics (EE)	ECE523(S), ECE 528(V), ECE 530**(F), ECE531(F), ECE538(F), ECE557(F), ECE 722(F), ECE 723(SO), ECE 724(S) ECE 725(S), ECE 727(V), ECE 729(SA), ECE 739(S) ** Required for students majoring in nanoelectronics and photonics.
Key to course offerings: F- fall, S – spring, FS – both fall and spring, FO – fall odd years, FE – fall even years, SO – spring odd years, SE – spring even years, V – variable, depending on instructor availability, Sum – summer, for courses that have an inconsistent history, we have noted the last time it was offered.	

