

Department of Electrical and Computer Engineering  
Ph.D. Qualifying Exam Part A - Core Courses Form

Ph.D. Qualifying Exam Part A - Core Courses Are:

Area	Fall semester	Spring semester
Electromagnetics	ECE 835: Advanced Electromagnetic Fields and Waves I	ECE 850: Electrodynamics of Plasmas
Materials and Devices	ECE 874: Physical Electronics	ECE 875: Electronic Devices
Microelectronics	ECE 832: Analog Integrated Circuit Design	
Computing	ECE 830: Embedded Cyber-Physical Systems (yet to be approved by ECE faculty)	ECE 816: Cryptography and Network Security
		ECE 884: Deep Learning and Neural Networks
Controls & Robotics	ECE 851: Linear Systems and Control	ECE 818: Robotics
Energy and Power Systems	ECE 821: Advanced Power Electronics and Applications	ECE 822: Power System Analysis
Signal Processing and Communications	ECE 863: Analysis of Stochastic Systems	ECE 864: Detection and Estimation Theory

From the above table of courses, list below the three courses for your Part A qualifying exam.

Course #1: \_\_\_\_\_ Semester Taken: \_\_\_\_\_ Grade Received: \_\_\_\_\_

Course #2: \_\_\_\_\_ Semester Taken: \_\_\_\_\_ Grade Received: \_\_\_\_\_

Course #3: \_\_\_\_\_ Semester Taken: \_\_\_\_\_ Grade Received: \_\_\_\_\_

Return this form with the above information filled in to the ECE Graduate Secretary, Meagan Kroll ([krollm@egr.msu.edu](mailto:krollm@egr.msu.edu)) in room 2325 Engineering Building.

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YES NO

Each course grade above is 3.0 or higher.

The average grade for the three courses above is 3.5 or higher.

The courses listed above were completed within 2 years of entering the ECE Ph.D. Program.