DOCTOR OF PHILOSOPHY WITH A MAJOR IN PHYSICS

Physics: Graduate Information (http://www.physics.gatech.edu/graduate-program)

The PhD degree in physics requires:

1. Successful completion of a set of core physics courses;
2. Demonstration of competency in written English;
3. Presentation of a thesis proposal;
4. Successful completion of set of courses in a ‘minor’ subject;
5. A written PhD thesis

Students are admitted to candidacy why they have completed the first three steps above. The core physics courses required by the School are devoted to coursework as follows:

**First Semester**
- PHYS 6101 Classical Mechanics I 3
- PHYS 6103 Electromagnetism I 3
- PHYS 6105 Quantum Mechanics I 3
- PHYS 6124 Mathematical Methods of Physics I 3

**Second Semester**
- PHYS 6107 Statistical Mechanics I 3
- PHYS 6104 Electromagnetism II 3
- PHYS 6106 Quantum Mechanics II 3
- PHYS 8901 Special Problems 3

The School requires every doctoral student to take two lecture-type graduate physics courses not including those previously listed. In some cases, these may be used to satisfy the Institute requirement that every doctoral student earn 9 credit hours in a minor course of study in a scientific subfield different from the subfield of his or her PhD thesis research. Alternatively, these credit hours are earned in a school other than physics. Finally, each student must prepare a written dissertation that summarizes the PhD research and present a public, oral defense of the dissertation to a Thesis Exam Committee.