

Sample Curriculum for students intending to pursue graduate study in physics

In order to be well-prepared for subsequent graduate study, students should take as many upper level physics electives as possible. In particular, it is important to take the optional second semesters of classical mechanics (430), electrodynamics (440), and quantum mechanics (450).

The following course sequence assumes a good mathematical background. (F) indicates a course should be taken during the Fall semester; (W) indicates Winter.

First Year

MTH 201 Calculus I (F)
MTH 202 Calculus II (W)
PHY 230 Principles of Physics I (W)
CHM 115 Principles of Chemistry I (F)
CHM 116 Principles of Chemistry II (W)
WRT 150 Strategies in Writing
One general education course (recommend life science)

Second Year

MTH 203 Calculus III (F)
MTH 227 Linear Algebra (F)
MTH 304 Differential Equations (W)
PHY 231 Principles of Physics II (F)
PHY 302 Introduction to Modern Physics (W)
CS 162 Computer Science I
Three general education courses

Third Year

MTH 300 Applied Analysis I (F)
PHY 309 Experimental Methods in Physics (F)
PHY 311 Advanced Laboratory II (W)
PHY 330 Intermediate Mechanics (F)
PHY 340 Electromagnetic Fields (W)
PHY 350 Introduction to Quantum Mechanics (W)
Two general education courses (begin Theme)

Fourth Year

PHY 360 Thermodynamics (F)
PHY 430 Advanced Mechanics (F)
PHY 440 Advanced Electricity and Magnetism (W)
PHY 450 Quantum Mechanics (W)
PHY 485 Senior Physics Project I (F)
PHY 486 Senior Physics Project II (W)
Two general education courses (finish Theme)