

PHYSICS, DOCTOR OF PHILOSOPHY (PH.D.)

The requirements for the Doctor of Philosophy degree in physics are set in general terms to allow the individual student as much freedom as possible to prepare a course of study suited to individual needs. These requirements are: competence in standard topics of graduate-level physics indicated by a satisfactory performance on a qualifying examination—the qualifying exam requirement may be waived by the Department if competence in these topics is demonstrated through performance in courses covering core graduate physics topics; the giving of an oral Preliminary Research Presentation demonstrating the ability to organize and orally present a topic of current research interest in physics; a paper showing the student's ability to organize and present a written scholarly report on contemporary research prior to candidacy; advanced course study consisting of at least three courses at the 600-level or above (of at least 3 credits each) excluding courses covering core graduate physics subjects, seminar courses or independent studies; active participation in at least two hours of seminar, 12 hours of thesis research, and the presentation and defense of an original dissertation.

Course	Title	Credits
Any three graduate-level courses of three credits or more excluding seminars, independent study courses, or courses on core graduate-level physics subjects		
Non-credit Foundations and Frontiers of Physics seminar		
Select two semesters of a physics seminar course		
Pass the qualifying exam or have this exam requirement waived on the basis of performance in course work		
Give a Preliminary Research presentation after passing the qualifying exam		
Submit a scholarly paper		
Dissertation Research Requirements		
PHYS899	Doctoral Dissertation Research	12
Total Credits		12