

# PHYSICS, PH.D.

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## Learning Outcomes

1. Students will demonstrate comprehension of the major fundamental branches of physics and their applications.
2. Students will conduct a program of original research leading to the completion of a Ph.D. dissertation.
3. The students will arrange material in a coherent manner and illustrate scientific details in an understandable fashion for a scientific audience.
4. Students will gain classroom experience by acting as an independent instructor for undergraduate and/or graduate courses in physics. Service as instructor of one section of a course with multiple sections is sufficient to satisfy this requirement.

## Degree Requirements (60 Post-Baccalaureate Hours)

The requirements for the degree of Doctor of Philosophy include 60 semester hours of advanced course work (or 30 semester hours beyond the master's degree), written and oral examinations for admission to candidacy, and a dissertation. Beyond the basic courses taken by most graduate students, the formal course work of Ph.D. students is quite flexible and is decided by consultation between the student and the student's advisory committee. Usually five or six years are required to complete the doctoral program. The majority of time during the student's last two years of residence will be devoted to individual research under the guidance of a member of the faculty on a problem of mutual interest. This research forms the basis for the doctoral dissertation.