## Graduate Studies in Physics
### Ph.D. Degree Requirements

#### Course Requirements
To allow students the flexibility to choose courses that are related to their field of research, there is no set course track for physics graduate students. However, there are a few requirements:
- All students must take two courses outside their area of specialization. One of these must be a 700 or 800 level physics course.
- All students must take two semesters of a physics seminar course.
- Theory students must take either PHYS624 or PHYS625.
- All students must take the Foundations and Frontiers of Physics seminar.

#### Candidacy Requirements
To advance to candidacy, all students must:
- Pass the Qualifying Exam. Students are given three tries to pass the exam. A “free try” is allowed within the first year of study.
- Give a Preliminary Research Presentation. This presentation is expected to be given within a year after passing the Qualifying Exam.
- Submit a Scholarly Paper. This paper should be written within four years of entering the graduate program.

#### Ph.D. Requirements
To graduate with the Doctor of Philosophy degree, all students must:
- Take at least 12 credits (2 semesters) of Doctoral Dissertation Research (PHYS899). Students who have reached candidacy will be registered for 6 credits of PHYS899 each semester until they graduate.
- Successfully defend their dissertation.
- Complete all of the requirements for advancing to candidacy.

## Ph.D. Program Timeline

<table>
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<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Years 7+</th>
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<tbody>
<tr>
<td><strong>Pass Qualifying Exam</strong></td>
<td><strong>Advance to Candidacy</strong></td>
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<td><strong>Graduate!</strong></td>
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<tr>
<td><strong>Recommended First-Year Courses</strong>&lt;br&gt;Fall: 601, 604, 622&lt;br&gt;Spring: 603, 606, 623</td>
<td><strong>Electives &amp; Seminars</strong>&lt;br&gt;- Two electives outside your area of specialization&lt;br&gt;- Two semesters of seminars</td>
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<td><strong>Doctoral Dissertation Research</strong>&lt;br&gt;Two semesters of 899</td>
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<td><strong>Foundations and Frontiers of Physics</strong>&lt;br&gt;Non-credit required seminar (offered in the Spring)</td>
<td><strong>Complete Preliminary Research Presentation and Scholarly Paper</strong></td>
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<td><strong>Finalize Dissertation Committee Members</strong></td>
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<td><strong>Find a Research Group</strong></td>
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