### PHYSICS, PHD

**Requirements for Students Matriculating in or before Academic Year 2019-2020.** Learn more about Graduate College Academic Regulation 7.0 ([http://catalog.okstate.edu/graduate-college](http://catalog.okstate.edu/graduate-college)).

**Total Hours:** 60 Hours (Beyond the Master’s Degree)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 5113</td>
<td>Statistical Thermodynamics and Kinetic Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 5213</td>
<td>Statistical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 5313</td>
<td>Electromagnetic Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 5413</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 5453</td>
<td>Methods of Theoretical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 5613</td>
<td>Quantum Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 6313</td>
<td>Quantum Mechanics II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Hours Subtotal:** 21

#### Electives

Select a minimum of 9 hours of PHYS 5000- or 6000-level courses:

**Hours Subtotal:** 9

#### Research

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 6000</td>
<td>(Offered for variable credit, 1-15 credit hours, maximum of 60 credit hours.)</td>
<td>30</td>
</tr>
</tbody>
</table>

**Hours Subtotal:** 30

**Total Hours:** 60

1 Combined elective and research hours should total 39 hours.

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**General Graduate College Requirements**

- A minimum Grade-Point-Average of 3.00 is required
- A minimum Grade of "C" is required in all degree applicable courses
- No courses utilizing the Pass-No Pass grading system are permitted
- GRAD 5082 or GRAD 5092 may not be used to meet degree requirements

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### Additional Doctor of Philosophy (PhD.) Requirements

- 90 credits beyond the Bachelor’s degree, 60 credits beyond the Master’s degree are required
- At least seventy-five percent of coursework on the Plan of Study must include 5000 and 6000 level courses
- A minimum of 15 hours at the 6000 level with a grade of SR for the doctoral dissertation must be complete. The maximum number of dissertation hours (6000 with a grade of SR) permissible on a Plan of Study must not exceed three-fourths of the total credit hours in the approved graduate degree program
- Credit for all courses on a graduate Plan of Study must have been awarded within 10 years of completion of all degree requirements
- A minimum of 30 in-residence credit hours are required

#### Non-Course requirements:

- Doctoral Candidacy
- Dissertation Defense
- Dissertation Submission/Approval

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2 Combined elective and research hours should total 51 hours.