REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY
DODGE COLLEGE OF ARTS AND SCIENCES
THE UNIVERSITY OF OKLAHOMA

Minimum Total Hours: 90
Program Code: D170 R520

Program Requirements
- Continuous enrollment in CHEM 5090 Departmental Colloquium is required for all Doctoral students.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 5011</td>
<td>Fundamentals I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 5021</td>
<td>Fundamentals II</td>
<td>1</td>
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<tr>
<td>CHEM 5080</td>
<td>Laboratory Rotations</td>
<td>2</td>
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<tr>
<td>CHEM 5591</td>
<td>Seminar in Physical Chemistry (Continuous enrollment, up to 12 credit hours, is required after the first semester)</td>
<td>1-12</td>
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</tbody>
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Core Courses
- CHEM 5500 | Topics in Quantum Chemistry                     | 2            |
- CHEM 5530 | Topics in Statistical Thermodynamics             | 3            |

Dissertation Research
- CHEM 6980 | Research for Doctoral Dissertation (minimum 2 credits) | 2            |

Elective Coursework
- Electives as approved by doctoral advisory committee to bring student to 90 post-baccalaureate hours. This may include up to 9 credits of CHEM 5990, Independent Study or up to 6 credits CHEM 5960, Directed Readings in Chemistry. ¹

Total Credit Hours  90

¹The total number of letter-graded hours of Core and Electives combined must total at least 16 hours.
The additional coursework may include other concentrations in CHEM; out-of-department coursework; or transfer credits from an accredited college or university.
At least 1 course (2 credit hours) must come from within the department (CHEM), but from a concentration outside the student’s core courses.