

## DOCTORAL DEGREE REQUIREMENTS

General policies for all University of Oklahoma doctoral programs are available in the [Graduate College Bulletin](#).

**DOCTOR of PHILOSOPHY**

D170/R434

**MAJOR:** Chemistry and Biochemistry

**CONCENTRATION:** Materials Chemistry

Program effective **Summer 2023**

### COURSEWORK REQUIREMENTS

#### REQUIRED COURSEWORK

<input type="checkbox"/> CHEM 5090	Departmental Colloquium (continuous enrollment required).....	0 hours
<input type="checkbox"/> CHEM 5011	Fundamentals I.....	1 hours
<input type="checkbox"/> CHEM 5021	Fundamentals II.....	1 hours
<input type="checkbox"/> CHEM 5080	Laboratory Rotations .....	2 hours
<input type="checkbox"/> CHEM 5391/5591	Seminar in Inorganic/Physical Chemistry.....	1-12 hours
Continuous enrollment in 5391 or 5591 is required after the first semester, up to 12 credits or 90 total degree credit are reached.		
<b>Total.....</b>		<b>5-16 hours</b>

#### CORE COURSES

Enrollment in any combination of the following 3 courses to equal a minimum of 6 hours.

<input type="checkbox"/> CHEM 5300	Intermediate Inorganic Chemistry .....	2 hours
<input type="checkbox"/> CHEM 5330	Advanced Inorganic Chemistry .....	2-3 hours
<input type="checkbox"/> CHEM 5500	Topics in Quantum Chemistry.....	2 hours
<b>Total.....</b>		<b>6+ hours</b>

#### Elective Coursework

Additional 5000- and/or 60000-level coursework: minimum of 9 hours of coursework as approved by the Ph.D. advisory committee so that the total number of letter-graded hours of core and electives combined equals a minimum of 16 hours. The additional coursework may include other concentrations in CHEM; out-of-department coursework; or transfer credits from 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.

**Total..... 9+ hours**

#### Directed Studies

Up to 9 hours of CHEM 5990 or 6 hours of CHEM 5960 can be used for degree requirements.

**Total..... 0-9 hours**

#### Dissertation Research

CHEM 6980 Research for Doctoral Dissertation.....**2+ hours**  
2 hours minimum.

**TOTAL..... 90 hours**