

# REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY

## DODGE FAMILY COLLEGE OF ARTS AND SCIENCES

### THE UNIVERSITY OF OKLAHOMA

Academic Year
For Students Entering the Oklahoma State System for Higher Education Summer 2025 through Spring 2026

General Requirements
Minimum Total Hours ..... 90

Program
Physics
D780
Doctor of Philosophy

#### PROGRAM REQUIREMENTS

Code	Title	Credit Hours
<b>Required Physics and/or Astronomy Coursework (36 hours)</b>		
PHYS 5000	Introduction to Graduate Studies in Physics	0
PHYS 5013	Mathematical Methods in Physics	3
PHYS 5153	Classical Mechanics	3
PHYS 5163	Statistical Mechanics	3
PHYS 5393	Quantum Mechanics I	3
PHYS 5403	Quantum Mechanics II	3
PHYS 5573	Electrodynamics I	3
PHYS 5583	Electrodynamics II	3
15 hours in PHYS and ASTR coursework at the 5000-level and above (excluding 5980 and 6980), or in related fields at the graduate-4000-level and above as approved by the advisory committee and graduate liaison <sup>1</sup>		15
PHYS 6980	Research for Doctoral Dissertation (minimum 2 hours)	2
<b>Additional Coursework (52 hours)</b>		
Additional graduate-level coursework as needed to reach 90 post-baccalaureate hours, as approved by the advisory committee		52
<b>Total Credit Hours</b>		<b>90</b>

<sup>1</sup> If the dissertation topic is in Astronomy, the curriculum must include at least 12 hours of Astronomy courses, including ASTR 4303 and any ASTR courses at the 5000-level or above, excluding 5980 and 6980.

#### NOTE:

The General Exam consists of a written paper and oral presentation on an area related to proposed thesis. The General Exam can only be taken after passing the internal departmental qualifying exams on Quantum Mechanics, Electrodynamics, Classical & Statistical Mechanics and (if appropriate) Astrophysics.

#### GENERAL REQUIREMENTS FOR DOCTORAL DEGREES

A student should expect to spend at least the equivalent of three full academic years beyond the bachelor's degree to obtain the doctoral degree. During this period the student will take appropriate graduate coursework, successfully complete the general examination, and successfully defend and submit the final dissertation.

All coursework applied to the doctoral degree must carry graduate credit.

The doctoral degree requires at least 90 post-baccalaureate hours, including both formal coursework and hours of research.

The minimum hour requirement for a specific doctoral degree program cannot be waived.

No more than one-half of the credit hours, both OU and overall, excluding Research for Doctoral Dissertation (6980), may be S/U-graded coursework.

The student must be in residence at OU for at least two consecutive 16-week semesters during the pursuit of the doctoral degree while enrolled and engaged in coursework or research activities as prescribed by the major academic unit.

For more detailed regulations and requirements for Doctoral degrees, please consult the Graduate College Bulletin: <http://www.ou.edu/gradcollege/forms/bulletin>

More information in the catalog: (<http://ou-public.courseleaf.com/dodge-arts-sciences/dodge-physics-astronomy/physics-doctor-philosophy/>).