
DOCTORAL DEGREE REQUIREMENTS

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

DOCTOR of PHILOSOPHY

D780

MAJOR: Physics

Program effective **Fall 2020**

COURSEWORK REQUIREMENTS

| | | | |
|--------------------------|---|---|-----------------|
| <input type="checkbox"/> | PHYS 5000 | Introduction to Graduate Studies in Physics | 0 hours |
| <input type="checkbox"/> | PHYS 5013 | Mathematical Methods in Physics..... | 3 hours |
| <input type="checkbox"/> | PHYS 5393 | Quantum Mechanics I..... | 3 hours |
| <input type="checkbox"/> | PHYS 5403 | Quantum Mechanics II..... | 3 hours |
| <input type="checkbox"/> | PHYS 5153 | Classical Mechanics | 3 hours |
| <input type="checkbox"/> | PHYS 5573 | Electrodynamics I..... | 3 hours |
| <input type="checkbox"/> | PHYS 5583 | Electrodynamics II..... | 3 hours |
| <input type="checkbox"/> | PHYS 5163 | Statistical Mechanics | 3 hours |
| <input type="checkbox"/> | Physics and Astronomy courses at the 5000 level and above (excluding 5980 and 6980) or in related fields at the G4000 level and above if approved by the advisory committee and the graduate liaison..... | | 15 hours |
| | Total | | 36 hours |

The remaining 53 credit hours may be course work, seminars, or dissertation hours as approved by the advisory committee.

Dissertation Research

| | | | |
|--------------------------|-------------------|---|--------------------------------------|
| <input type="checkbox"/> | PHYS 6980 | Research for Doctoral Dissertation..... | 2-54 hours 2 hours minimum |
| <input type="checkbox"/> | TOTAL..... | | 90 hours |

NOTE

If the dissertation topic is Astronomy, the curriculum must include at least 12 hours of Astronomy courses including ASTR 4303 Stellar Astrophysics and any ASTR course at the 5000 level or above, excluding ASTR 5980 and ASTR 6980.

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.