MEDICAL PHYSICS, PH.D.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

<table>
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<tr>
<th>Mode of Instruction</th>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
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<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students are able to complete a program with minimal disruptions to careers and other commitments.

Evening/Weekend: Courses meet on the UW-Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirements Detail

Minimum Credit Requirement

54 credits

Minimum Residence Credit Requirement

42 credits

Minimum Graduate Coursework Requirement

Seventy-five percent of degree coursework (40 credits out of 54 total credits) must be in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle(http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle/)).

Overall Graduate GPA Requirement

3.00 GPA required.

REQUIRED COURSES

Code | Title | Credits
---|---|---
MED PHYS/B ME/H ONCOL/ PHYSICS 501 | Radiation Physics and Dosimetry | 3
MED PHYS/B ME 566 | Physics of Radiotherapy | 3
MED PHYS/N E 569 | Health Physics and Biological Effects | 3
MED PHYS/B ME 573 | Medical Image Science: Mathematical and Conceptual Foundations | 3
MED PHYS/B ME 574 | Imaging in Medicine: Applications | 3
MED PHYS/B ME 578 | Non-Ionizing Diagnostic Imaging | 4
MED PHYS/B ME 580 | The Physics of Medical Imaging with Ionizing Radiation | 4
MED PHYS/PHYSICS 588 | Radiation Production and Detection | 4
MED PHYS 510 | Fundamentals of Cellular, Molecular, and Radiation Biology | 3
MED PHYS 671 | Selected Topics in Medical Physics (Topic: Anatomy and Physiology) | 2
MED PHYS 701 | Ethics and the responsible conduct of research and practice of Medical Physics | 1
MED PHYS 900 | Journal Club and Seminar | 4

Other Grade Requirements

The Graduate School requires an average GPA of 3.00 or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.

Assessments and Examinations

Candidates are expected to take the Oral Qualifying Examination by the end of the 4th semester of study, and to take the PhD Preliminary Examination by the end of the third year of study. Permission of the Department Chair is required if the PhD Preliminary Examination must be taken after the end of the third year. Defense of a dissertation is required within five years of successful completion of the PhD Preliminary Examination.

Language Requirements

No language requirements.

Minor/Breadth Requirements

A doctoral minor is not required for students in the Medical Physics Graduate Program as graduate students enroll in sufficient breadth courses required for completing the "CAMPEP Track" in our graduate program (>98% of students). However, a student can complete a minor offered by another graduate program at UW-Madison, if desired and with the approval of his/her advisor. Please see the Medical Physics Graduate Student Handbook (https://www.medphysics.wisc.edu/wp/graduate-program/) for more information.

Required Courses

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Advanced Coursework - In consultation with their advisor/committee, students select nine credits of MED PHYS at the 600 level or above.  

<table>
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<tr>
<th>Required Courses for Health Physics Emphasis</th>
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<tr>
<td>N E 427 Nuclear Instrumentation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>N E 571 Economic and Environmental Aspects of Nuclear Energy</td>
<td>3</td>
</tr>
<tr>
<td>MED PHYS 699 Independent Reading or Research</td>
<td>1</td>
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One (1) credit of an independent reading course (699) on Health Physics Rules and Regulations.

An exemption from the Core Curriculum requirement requires the approval of the chair of the graduate committee. If the entirety of the Core Curriculum is not taken, the student will not satisfy the CAMPEP Core Curriculum requirement.

These tracks are internal to the program and represent different pathways a student can follow to earn this degree. Track names do not appear in the Graduate School admissions application, and they will not appear on the transcript.