

# MEDICAL PHYSICS: ACCELERATED PROGRAM, MS

The Accelerated Program is a non-thesis option designed specifically for students seeking a terminal master's degree with the goal of becoming a board-certified clinical medical physicist. The degree follows our CAMPEP accredited program coursework.

## ADMISSIONS

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Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	December 1
Spring Deadline	The program does not admit in the spring.
Summer Deadline	The program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required.
English Proficiency Test	Every applicant whose native language is not English, or whose undergraduate instruction was not exclusively in English, must provide an English proficiency test score earned within two years of the anticipated term of enrollment. Refer to the Graduate School: Minimum Requirements for Admission policy: <a href="https://policy.wisc.edu/library/UW-1241">https://policy.wisc.edu/library/UW-1241</a> ( <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> ).

Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	3

The following courses are taken as a VISP student and are considered prerequisites to the Medical Physics MS: Accelerated Program option.

Code	Title	Credits
<b>1st Semester -- (Fall) Visiting Undergraduate Student</b>		
MED PHYS/ B M E/H ONCOL/ PHYSICS 501	Radiation Physics and Dosimetry	3

MED PHYS/ B M E 573	Mathematical Methods in Medical Physics	3
MED PHYS 510	Fundamentals of Cellular, Molecular, and Radiation Biology	3
Select one of the following:		3
3 credits of elective Rad Labs		
1 credit of elective Rad Lab and MED PHYS 671 (Topic: Anatomy & Physiology, 2 credits)		
<b>2nd Semester (Spring) Visiting Undergraduate Student</b>		
MED PHYS/ B M E 566	Physics of Radiotherapy	3
MED PHYS/ B M E 580	The Physics of Medical Imaging with Ionizing Radiation	4
MED PHYS/N E 569	Health Physics and Biological Effects	3-4
MED PHYS/ PHYSICS 588	Radiation Production and Detection ( Choice of either MED PHYS 770 or Radiation Detection and Production based on odd/even semester) or MED PHYS 770 Advanced Brachytherapy Physics	4
<b>Elective(s)</b>		<b>0-5</b>
MED PHYS 662	Rad Lab - Diagnostic Radiological Physics	
MED PHYS 663	Rad Lab - Nuclear Medicine Physics	
MED PHYS 664	Rad Lab - Health Physics	
MED PHYS 665	Rad Lab - CT, MRI, and DSA Physics	
MED PHYS 666	Rad Lab - Medical Ultrasound Physics	
<b>Total Credits</b>		<b>26-32</b>

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

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

### NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	Yes

#### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**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

### Requirement Detail

Minimum 40 credits

Credit Requirement

Minimum 25 credits

Residence Credit Requirement

Minimum Graduate Coursework Requirement 20 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: <https://policy.wisc.edu/library/UW-1244> (<https://policy.wisc.edu/library/UW-1244/>).

Overall 3.00 GPA required.

Graduate GPA Requirement Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <https://policy.wisc.edu/library/UW-1203> (<https://policy.wisc.edu/library/UW-1203/>).

Other Grade n/a

Requirements

Assessments n/a

and Examinations

Language No language requirements.

Requirements

## REQUIRED COURSES

Students in the Medical Physics MS: Accelerated Program start their coursework as a VISIP student. The coursework taken as a VISIP student can be found in the admissions tab.

### Medical Physics MS: Accelerated Program Coursework taken as a Graduate Student

After completing coursework as a VISIP student, graduate students in the Medical Physics MS: Accelerated Program complete the following coursework:

Code	Title	Credits
<b>Fall Semester</b>		
MED PHYS 701	Ethics and the responsible conduct of research and practice of Medical Physics	1
MED PHYS 772	Advanced Radiation Treatment Planning	3
MED PHYS 679	Radiation Physics Metrology	3
MED PHYS 777	Principles of X-ray Computed Tomography	3
MED PHYS 581	Laboratory for Medical Imaging with Ionizing Radiation	1
MED PHYS 900	Journal Club and Seminar	1
<b>Spring Semester</b>		

MED PHYS/ B M E 574	Data Science in Medical Physics	3
MED PHYS/ B M E 578	Non-Ionizing Diagnostic Imaging	4
MED PHYS/ PHYSICS 588	Radiation Production and Detection	4
MED PHYS 770	Advanced Brachytherapy Physics (offered every even spring semester)	3
MED PHYS 900	Journal Club and Seminar	1
<i>Elective(s)</i>		13-15

Courses taken as a VISIP student can transfer (up to 15 credits)

**Total Credits 40**

## POLICIES

### POLICIES

#### GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy/>) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

#### NAMED OPTION-SPECIFIC POLICIES PRIOR COURSEWORK

##### Graduate Credits Earned at Other Institutions

No transfer coursework accepted.

##### Undergraduate Credits Earned at Other Institutions or UW-Madison

No transfer coursework accepted.

##### Credits Earned as a Professional Student at UW-Madison (Law, Medicine, Pharmacy, and Veterinary careers)

Refer to the Graduate School: Transfer Credits for Prior Coursework (<https://policy.wisc.edu/library/UW-1216/>) policy.

##### Credits Earned as a University Special student at UW-Madison

With program approval, students are allowed to count no more than 15 credits of coursework numbered 500 or above taken as a UW-Madison Special student. Coursework earned ten or more years prior to admission to the master's degree program is not allowed to satisfy requirements.

#### PROBATION

For a graduate student in the Medical Physics Department to be making satisfactory progress, they must:

1. Obtain at least a 3.0 GPA in the most recent semester. Grades in all research courses and courses with grades of P, S, or U are excluded from the average. A student who fails to make satisfactory progress may be withdrawn from the department. In exceptional cases, the department chair may grant permission to continue for a specified probationary period.

- Maintain a minimum cumulative GPA of 3.0 for all courses taken while in the Medical Physics program and for all Department of Medical Physics courses. All research courses and all courses with grades of P, S, or U are excluded from the average.

Any student, who fails to meet the requirements of 1–2 above, will be placed on probation. Failure in the first semester of probation to obtain a 3.0 average for the semester and a cumulative GPA of at least 3.0 will result in termination unless the student's advisor requests and the department and the Graduate School approves, continued enrollment. The particular courses which count toward the GPA in any probation semester must be approved in writing by the student's advisor and the Medical Physics Graduate Committee Chair in order for the work to count toward returning the student to good standing.

## ADVISOR/COMMITTEE

Students will be assigned an advisor by the beginning of the first semester of study.

## CREDITS PER TERM ALLOWED

15 credits

## TIME LIMITS

All MS degree course requirements should be completed by the end of the first year of study.

MS students who have been absent for five or more consecutive years lose all credits that they have earned before their absence.

## GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (<https://doso.students.wisc.edu/bias-or-hate-reporting/>)
- Graduate Assistantship Policies and Procedures (<https://hr.wisc.edu/policies/gapp/#grievance-procedure>)
- Hostile and Intimidating Behavior Policies and Procedures (<https://hr.wisc.edu/hib/>)
  - Office of the Provost for Faculty and Staff Affairs (<https://facstaff.provost.wisc.edu/>)
- Dean of Students Office (<https://doso.students.wisc.edu/>) (for all students to seek grievance assistance and support)
- Employee Assistance (<http://www.eao.wisc.edu/>) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (<https://employeedisabilities.wisc.edu/>) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (<https://grad.wisc.edu/>) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (<https://compliance.wisc.edu/>) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office of Student Conduct and Community Standards (<https://conduct.students.wisc.edu/>) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (<http://www.ombuds.wisc.edu/>) (for employed graduate students and post-docs, as well as faculty and staff)

- Title IX (<https://compliance.wisc.edu/titleix/>) (for concerns about discrimination)

## Grievance Policy for Graduate Programs in the School of Medicine and Public Health

Any student in a School of Medicine and Public Health graduate program who feels that they have been treated unfairly in regards to educational decisions and/or outcomes or issues specific to the graduate program, including academic standing, progress to degree, professional activities, appropriate advising, and a program's community standards by a faculty member, staff member, postdoc, or student has the right to complain about the treatment and to receive a prompt hearing of the grievance following these grievance procedures. Any student who discusses, inquires about, or participates in the grievance procedure may do so openly and shall not be subject to intimidation, discipline, or retaliation because of such activity. Each program's grievance advisor is listed on the "Research" tab of the SMPH intranet (<https://intranet.med.wisc.edu/>).

### Exclusions

This policy does not apply to employment-related issues for Graduate Assistants in TA, PA and/or RA appointments. Graduate Assistants will utilize the Graduate Assistantship Policies and Procedures (<https://hr.wisc.edu/policies/gapp/>) (GAPP) grievance process to resolve employment-related issues.

This policy does not apply to instances when a graduate student wishes to report research misconduct. For such reports refer to the UW-Madison Policy for Reporting Research Misconduct for Graduate Students and Postdoctoral Research Associates (<https://research.wisc.edu/kb-article/?id=84924>).

### Requirements for Programs

The School of Medicine and Public Health Office of Basic Research, Biotechnology and Graduate Studies requires that each graduate program designate a grievance advisor, who should be a tenured faculty member, and will request the name of the grievance advisor annually. The program director will serve as the alternate grievance advisor in the event that the grievance advisor is named in the grievance. The program must notify students of the grievance advisor, including posting the grievance advisor's name on the program's Guide page and handbook.

The grievance advisor or program director may be approached for possible grievances of all types. They will spearhead the grievance response process described below for issues specific to the graduate program, including but not limited to academic standing, progress to degree, professional activities, appropriate advising, and a program's community standards. They will ensure students are advised on reporting procedures for other types of possible grievances and are supported throughout the reporting process. Resources (<https://grad.wisc.edu/current-students/#reporting-incidents>) on identifying and reporting other issues have been compiled by the Graduate School.

### Procedures

- The student is advised to initiate a written record containing dates, times, persons, and description of activities, and to update this record while completing the procedures described below.
- If the student is comfortable doing so, efforts should be made to resolve complaints informally between individuals before pursuing a formal grievance.
- Should a satisfactory resolution not be achieved, the student should contact the program's grievance advisor or program

director to discuss the complaint. The student may approach the grievance advisor or program director alone or with a UW-Madison faculty or staff member. The grievance advisor or program director should keep a record of contacts with regards to possible grievances. The first attempt is to help the student informally address the complaint prior to pursuing a formal grievance. The student is also encouraged to talk with their faculty advisor regarding concerns or difficulties.

4. If the issue is not resolved to the student's satisfaction, the student may submit a formal grievance to the grievance advisor or program director in writing, within 60 calendar days from the date the grievant first became aware of, or should have become aware of with the exercise of reasonable diligence, the cause of the grievance. To the fullest extent possible, a grievance shall contain a clear and concise statement of the grievance and indicate the issue(s) involved, the relief sought, the date(s) the incident or violation took place, and any specific policy involved.
5. On receipt of a written grievance, the following steps will occur. The final step must be completed within 30 business days from the date the grievance was received. The program must store documentation of the grievance for seven years. Significant grievances that set a precedent may be stored indefinitely.
  - a. The grievance advisor or program director will convene a faculty committee composed of at least three members to manage the grievance. Any faculty member involved in the grievance or who feels that they cannot be impartial may not participate in the committee. Committee composition should reflect diverse viewpoints within the program.
  - b. The faculty committee, through the grievance advisor or program director, will obtain a written response from the person or persons toward whom the grievance is directed. The grievance advisor or program director will inform this person that their response will be shared with the student filing the grievance.
  - c. The grievance advisor or program director will share the response with the student filing the grievance.
  - d. The faculty committee will make a decision regarding the grievance. The committee's review shall be fair, impartial, and timely. The grievance advisor or program director will report on the action taken by the committee in writing to both the student and the person toward whom the grievance was directed.
6. If either party (the student or the person or persons toward whom the grievance is directed) is unsatisfied with the decision of the program's faculty committee, the party may file a written appeal to the SMPH senior associate dean for basic research, biotechnology and graduate studies within 10 business days from the date of notification of the program's faculty committee. The following steps will occur:
  - a. The grievant will be notified in writing, within 5 business days of the written appeal, acknowledging receipt of the formal appeal and establishing a timeline for the review to be completed.
  - b. The senior associate dean or their designee may request additional materials and/or arrange meetings with the grievant and/or others. If meetings occur, the senior associate dean or their designee will meet with both the grievant and the person or persons toward whom the grievance is directed.
  - c. The senior associate dean or their designee will assemble an ad hoc committee of faculty from outside of the student's graduate program and ask them to prepare a written recommendation on whether to uphold or reverse the decision of the program on the student's initial grievance. The committee may request additional materials and/or arrange meetings with the grievant and/or others. If meetings occur, the committee will meet with both the grievant and the person or persons toward whom the grievance is directed.
  - d. The senior associate dean or their designee will make a final decision within 20 business days of receipt of the committee's recommendation.
  - e. The SMPH Office of Basic Research, Biotechnology, and Graduate Studies must store documentation of the grievance for seven years. Grievances that set a precedent may be stored indefinitely.
7. The student may file an appeal of the School of Medicine and Public Health decision with the Graduate School. See the Grievances and Appeals section of the Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/documents/grievances-and-appeals/>).

#### Time Limits

Steps in the grievance procedures must be initiated and completed within the designated time periods except when modified by mutual consent. If the student fails to initiate the next step in the grievance procedure within the designated time period, the grievance will be considered resolved by the decision at the last completed step.

#### OTHER

Accelerated MS degree students are generally self funded.

## PROFESSIONAL DEVELOPMENT

### PROFESSIONAL DEVELOPMENT GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (<https://grad.wisc.edu/pd/>) to build skills, thrive academically, and launch your career.

## PEOPLE

### PEOPLE

**Faculty:** Please see a comprehensive list of our faculty (<https://www.medphysics.wisc.edu/faculty/>) on the department website.