MEDICAL PHYSICS, MSMP

The Master of Science in Medical Physics (MSMP) degree program prepares students as future leaders for careers in medical physics specialties such as radiation therapy, diagnostic imaging, nuclear medicine, and health physics. Students gain the clinical experience necessary to apply for residencies and move into clinical practice as well as research experience to prepare students for a PhD program. The program is fully accredited by the Commission on Accreditation of Medical Physics Education Programs (CAMPEP).

For more information: https://www.med.upenn.edu/mpp/msmp/

Curriculum

A total of 15 course units is required, including a thesis. Students complete a faculty-mentored, applied research project of their own design, culminating in a paper and presentation.

First Year		**Course Units**
MPHY 6000	Professional Development [1]	0.0
MPHY 6010	Introduction to Radiation Protection	0.5
MPHY 6020	Physics of Medical / Molecular Imaging	1.0
MPHY 6030	Image-Based Anatomy	1.0
MPHY 6040	Radiological Physics	1.0
MPHY 6050	Medical Ethics / Government Regulation	0.5
MPHY 6060	Physics of Radiation Therapy	1.0
MPHY 6070	Radiation Biology	1.0
MPHY 6080	Radiation Detection and Measurement	1.0
	Course Units	**7.00**
Summer		
MPHY 7000	Clinical Practicum	1.0
	Course Units	**1.00**
Second Year		
MPHY 6100	Computational Medical Physics	1.0
MPHY 6110	Medical Physics Laboratory	1.0
MPHY 6090 or MPHY 6120	Biomedical Image Analysis or Artificial Intelligence for Medicine	1.0
MPHY 9900 & MPHY 9910	Thesis I and Thesis II	2.0
Select 2 electives		2.0
	Course Units	**7.00**
	Total Course Units	**15.00**

[1] Students enroll in MPHY 6000 in both fall and spring semester of their first year.

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2024 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.