MEDICAL PHYSICS - M.S.

The M.S. in Medical Physics program will provide training for individuals interested in pursuing a career in Medical Physics. The 43 hour Master's program will provide didactic training in the fundamentals of medical and health physics, radiobiology, radiological physics and radiation dosimetry, nuclear medicine, medical imaging, as well as research (Thesis required) and clinical experience (clinical rotations in local hospitals) to provide the experience needed by practicing medical physicists.

M.S., Medical Physics Degree requirements (43-46 credits)

Thesis Option (43 Credits)

Code	Title	Credits
Required Core courses:		
PHY 565	Radiation Biophysics	3
PHY 566	Physics of Medical Imaging I	3
PHY 567	Physics of Medical Imaging II	3
PHY 531	Quantum Mechanics	3
PHY 553	Computational Physics	3
PHY 561	Nuclear Physics	3
PHY 562	Nuclear Instruments And Methods	2
PHY 661	Physics of Radiation Therapy	3
PHY 662	Radiation Dosimetry and Protection	3
PHY 792	Medical Physics Seminar	2
PHY 797	Directed Independent Research	3
PHY 798	Medical Physics Clinical Rotation	3
Thesis Track		
PHY 799	Master's Thesis (or PHY 500-level or above)	6
PHY 793	Directed Independent Readings	3
or PHY 795	Directed Independent Study	
or PHY 797	Directed Independent Research	
Comprehensive Exam - all students must pass all sections of the three-part exam		
Total Credits		**43**

Non-Thesis Option (46 Credits)

Code	Title	Credits
Required Core courses:		
PHY 531	Quantum Mechanics	3
PHY 553	Computational Physics	3
PHY 561	Nuclear Physics	3
PHY 562	Nuclear Instruments And Methods	2
PHY 565	Radiation Biophysics	3
PHY 566	Physics of Medical Imaging I	3
PHY 567	Physics of Medical Imaging II	3
PHY 661	Physics of Radiation Therapy	3
PHY 662	Radiation Dosimetry and Protection	3
PHY 792	Medical Physics Seminar	2
PHY 797	Directed Independent Research	3
PHY 798	Medical Physics Clinical Rotation	3
Non-Thesis Track		
Electives:		**12**
Course electives may be selected with the consent of the advisor. These courses may come from the areas of mathematics/computer science, chemistry, biology, or other related field.		
Comprehensive Exam - all students must pass all sections of the three-part exam		
Total Credits		**46**