MASTER OF HEALTH PHYSICS

The Professional Master's Degree in Health Physics offers three tracks designed for professionals working in energy, government, medicine, research, and industry. The program emphasizes the expertise of the instructors and the accrued knowledge of the profession. The curricula supplement technical depth in health physics with professional competencies in regulatory affairs, occupational health and safety, environmental analysis and assessment, complemented by common skills in project management, public communication, and leadership.

Curriculum

Code	Title		Credit Hours
Required Courses			**(21)**
PHYS 550	Radiation Instrumentation Laboratory		3
PHYS 561	Radiation Biophysics		3
PHYS 571	Radiation Physics		3
PHYS 572	Introduction to Health Physics		3
PHYS 573	Standards, Statutes and Regulations		3
PHYS 575	Case Studies in Health Physics [1]		3
PHYS 576	Radiation Dosimetry		3
Health Physics Electives			**(4)**
Select a minimum of two courses from the following: [2]			4
PHYS 566	Environmental Health Physics	2	
PHYS 577	Operational Health Physics	2	
PHYS 578	Medical Health Physics	2	
Professional Electives			**(6)**
Select a minimum of two courses from the following:			6
MATH 525	Statistical Models and Methods	3	
SCI 511	Project Management	3	
SCI 522	Public Engagement for Scientists	3	
Total Credit Hours			**31**

1 PHYS 575 should be taken in the final semester of study.

2 One substitution for the articulated health physics electives may be chosen from the following courses with adviser and departmental approval: PHYS 567, PHYS 568, PHYS 569, PHYS 580, or PHYS 582.

A comprehensive examination is required for the degree, but the requirement will be waived for students who have completed all health physics courses (a total of 25 credit hours) with a GPA of 3.5/4.0 or above.

Master of Health Physics with Specialization in Radiochemistry

Code	Title		Credit Hours
Required Courses			**(24)**
PHYS 550	Radiation Instrumentation Laboratory		3
PHYS 561	Radiation Biophysics		3
PHYS 571	Radiation Physics		3
PHYS 573	Standards, Statutes and Regulations		3
PHYS 575	Case Studies in Health Physics [1]		3
PHYS 580	Introduction to Radiochemistry		3
PHYS 581	Radiochemistry Laboratory		3
PHYS 582	Applications of Radiochemistry		3
Health Physics Elective			**(2-3)**
Select a minimum of one course from the following:			2-3
PHYS 566	Environmental Health Physics	2	
CHEM 509	Physical Methods of Characterization	3	
or PHYS 539	Physical Methods of Characterization		

CHEM 512	Spectroscopic Methods II	2
Professional Electives		**(6)**
Select a minimum of two courses from the following:		6
MATH 525	Statistical Models and Methods	3
SCI 511	Project Management	3
SCI 522	Public Engagement for Scientists	3

Minimum degree credits required: 32

1 PHYS 575 should be taken in the final semester of study.

Master of Health Physics with Specialization in Radiological Security, Emergency Preparedness and Response

Code	Title	Credit Hours
Required Courses		**(21)**
PHYS 550	Radiation Instrumentation Laboratory	3
PHYS 567	Radiological Emergency Preparedness and Response	3
PHYS 568	Radiation Source Security and Management	3
PHYS 569	Seminars on Radiological Emergency Field Experience	3
PHYS 571	Radiation Physics	3
PHYS 572	Introduction to Health Physics	3
PHYS 575	Case Studies in Health Physics [1]	3
Health Physics Electives		**(5)**
Select a minimum of five credit hours from the following: [2]		5
PHYS 566	Environmental Health Physics	2
PHYS 580	Introduction to Radiochemistry	3
PHYS 582	Applications of Radiochemistry	3
Professional Electives		**(6)**
Select a minimum of six credit hours from the following:		6
MATH 525	Statistical Models and Methods	3
SCI 511	Project Management	3
SCI 522	Public Engagement for Scientists	3
Total Credit Hours		**32**

1 PHYS 575 should be taken in the final semester of study.

2 One substitution for the articulated health physics electives may be chosen from the following courses with adviser and departmental approval: PHYS 561, PHYS 573, PHYS 577, or PHYS 578.