

Upon entry into the program, students are expected to have completed the equivalent of two semesters of anatomy and physiology. Students that have not completed prior course work in anatomy and physiology are required to complete one of the following options: BIOL 203 and 204 or BMS 510 (Gross Anatomy) or equivalent.

**Requirements (24 credits)**

___	(2)	F	HSCI 31300 Principles of Radiation Detection and Measurement
___	(3)	Sp	HSCI 57000 Introduction to Medical Diagnostic Imaging
___	(1)	Sp	HSCI 61300 Professionalism and Professional Development in Health Sciences AND CITI Responsible Conduct of Research (RCR)
___	(1)	F	HSCI 62500 Grant Writing for Health Sciences
___	(3)	Sp	HSCI 67200 MRI QA Internship
___	(3)	Su	HSCI 67400 Diagnostic Imaging Physics Internship
___	(2)	F,Sp	HSCI 69600 Graduate Seminar*
___	(6+)	F,SpSu	HSCI 69900 Research PhD Thesis
___	(3)		_____ Statistics Selective – <i>select from list</i>

**Electives (12+ Credits)**

\_\_\_ ( ) \_\_\_\_\_    \_\_\_ ( ) \_\_\_\_\_    \_\_\_ ( ) \_\_\_\_\_    \_\_\_ ( ) \_\_\_\_\_

F=Fall, Sp=Spring, Su=Summer

\*All students are required to take HSCI 69600 for credit twice and for 0 credit all remaining fall and spring semesters.

A minimum of 24 coursework credit hours with no more than 6 credit hours at the 300 or 400 level is required for the M.S. degree. The student's advisory committee may approve alternative coursework in a plan of study that will assist the student in their research, including independent study projects under the guidance of a faculty member.

A total of 90 hours is required for the Ph.D. degree. These residency hours may be any combination of course credit hours or research credit hours. Up to 30 hours may be credited for an M.S. degree upon recommendation of the Ph.D. graduate student's advisory committee and this may include all required coursework and the clinical internship if the equivalent has recently been taken. No more than 6 credit hours of coursework at the 300 or 400 level is allowed to form part of the student's Ph.D. degree plan of study.

**Note:** Graduate courses taken while registered as a graduate student at Purdue University may be considered for fulfilling the plan of study requirements only if the student has received grades of C or better. For courses at the 300 or 400 level taken as a graduate student or courses that represent either undergraduate or graduate excess credit or transfer credit, grades of B or better are required for fulfilling plan of study requirements.

**Statistics Selectives**

- \_\_\_ (3) Sp HSCI 52500 Statistics for Health Sciences
- \_\_\_ (3) F,Sp,Su STAT 51100 Statistical Methods
- \_\_\_ (3) F,Sp,Su STAT 51200 Applied Regression Analysis
- \_\_\_ (3) F,Sp,Su STAT 51400 Design of Experiments

**Suggested Electives**

- \_\_\_ (3) F HSCI 31200 Radiation Science Fundamentals
- \_\_\_ (2) Sp HSCI 51400 Radiation Instrumentation Laboratory
- \_\_\_ (3) F HSCI 52600 Principles of Health Physics & Dosimetry
- \_\_\_ (3) Sp HSCI 54000 Radiation Biology
- \_\_\_ (2) F HSCI 54100 Human Sectional Anatomy
- \_\_\_ (3) FSp HSCI 30500 Basics of Oncology
- \_\_\_ (2) F HSCI 51600 Molecular Imaging in Nuclear Medicine
- \_\_\_ (1) Sp BME 51500 Practical MRI and Applications
- \_\_\_ (3) Varies HSCI 59000 Data Acquisition and Image Reconstruction in MRI
- \_\_\_ (3) Sp HSCI 59000 Magnetic Resonance Spectroscopy

**Suggested Arrangement of Courses:***Fall 1<sup>st</sup> year:*

<b>Credits</b>	<b>Course Name</b>
4	BIOL 20300
2	HSCI 31300
1	HSCI 69600
3	Elective
<b>10</b>	

*Spring 1<sup>st</sup> year:*

<b>Credits</b>	<b>Course Name</b>
4	BIOL 20400
3	HSCI 52500
3	HSCI 57000
1	HSCI 61300 & AAPM/RSNA Professional Conductivity
0	HSCI 69600
<b>11</b>	

*Summer 1<sup>st</sup> year:*

<b>Credits</b>	<b>Course Name</b>
3	HSCI 67400
3	HSCI 69900
<b>6</b>	

*Fall 2<sup>nd</sup> year:*

<b>Credits</b>	<b>Course Name</b>
1	HSCI 62500
3	HSCI 67200
0	HSCI 69600
3	HSCI 69900
3	Elective
<b>10</b>	

*Spring 2<sup>nd</sup> year:*

<b>Credits</b>	<b>Course Name</b>
0	HSCI 69600
3	HSCI 69900
6	Electives
<b>9</b>	

*Remaining Summer semesters:*

<b>Credits</b>	<b>Course Name</b>
6	HSCI 69900

*Remaining Fall/Spring semesters:*

<b>Credits</b>	<b>Course Name</b>
8	HSCI 69900
0	HSCI 69600

Student will take HSCI 69600 for credit one more semester  
(typically graduating semester).