RADIOLOGICAL HEALTH SCIENCES
Radiation Health and Safety Concentration
College of Health and Human Sciences

RADH-BS
RADH-RHAS
120 credits

Student: _____ PUID: _____ Catalog Term: Fall 2025

Additional Majors: _____ Minors: _____

Major Requirements (48 credits)

____ (4) BIOL 11000 Fundamentals of Biology I **[Satisfies 1 Science Core Course]**
____ (4) BIOL 11100 Fundamentals of Biology II **[Satisfies 1 Science Core Course]**
____ (4) BIOL 20300 Human Anatomy & Physiology
____ (4) BIOL 20400 Human Anatomy & Physiology
____ (3) CHM 11510 General Chemistry
____ (1) CHM 11520 General Chemistry Lab
____ (3) CHM 11610 General Chemistry
____ (1) CHM 11620 General Chemistry Lab
____ (2) HSCI 10100 Introduction to the Health Sciences Professions
____ (3) HSCI 20100 Principles of Public Health Science **[Satisfies Science, Technology & Society Core]**
____ (3) HSCI 20200 Essentials of Environmental, Occupational, and Radiological Health Sciences
____ (3) HSCI 31200 Radiation Science Fundamentals (must earn a grade of "C" or higher)
____ (2) HSCI 31300 Principles of Radiation Detection & Measurement (must earn a grade of "C" or higher)
____ (2) HSCI 51400 Radiation Instrumentation Laboratory (must earn a grade of "C" or higher)
____ (3) HSCI 54000 Radiation Biology (must earn a grade of "C" or higher)
____ (3) STAT 30100 Elementary Statistical Methods **[Satisfies Information Literacy Core]**
____ (3) _____Math-Computer Science Selective – *select from list*

Radiation Health and Safety Concentration Requirements (46 credits)

____ (3) HSCI 22500 Healthcare Leadership And Safety
____ (3) HSCI 34500 Introduction To Occupational And Environmental Health Sciences (must earn a grade of "C" or higher)
____ (3) HSCI 35300 Occupational Safety Management And Culture (must earn a grade of "C" or higher)
____ (3) HSCI 41500 Introduction to Nuclear and Radiological Source Security (must earn a grade of "C" or higher)
____ (3) HSCI 48500 Health Physics Industry Internship
____ (3) HSCI 53400 Applied Health Physics (must earn a grade of "C" or higher)
____ (2) HSCI 57400 Medical Health Physics (must earn a grade of "C" or higher)
____ (3) MA 16010 Applied Calculus I **[Satisfies Quantitative Reasoning Core]**
____ (4) PHYS 22000 General Physics or PHYS 23300 Physics for Life Sciences I
____ (4) PHYS 22100 General Physics or PHYS 23400 Physics for Life Sciences II
____ (3) _____Science Selective – *select from list (HSCI 52600 Recommended)*
____ (3) _____Science Selective – *select from list*
____ (3) _____Science Selective – *select from list*
____ (3) _____Science Selective – *select from list*
____ (3) _____Math-Computer Science or Science Selective - *select from list*

Other Departmental/Program Course Requirements (18-19 credits)

____ (3) COM 11400 Fundamental of Speech Communication **[Satisfies Oral Communication Core]**
____ (4-3) ENGL 10600 First Year Composition with Conferences *or* ENGL 10800 First-Year Composition **[Satisfies Written Communication Core] and [Information Literacy Core]**
____ (3) _____**[Behavioral/Social Science Core]** *select course from University list*
____ (3) _____**English Selective** – *select any 20000 level or above ENGL course*
____ (3) _____**HSCI Humanities, Behavioral/Social Sciences Selective** – *select from HSCI list*
____ (3) _____**[Humanities Core]** *select course from University list*

Electives (7-8 credits)

____ ( )_____ ____ ( ) _____ ____ ( ) _____ ____ ( ) _____

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation.

120 credits required for Bachelor of Science degree
Must earn a grade of "C" or higher in HSCI 31200, HSCI 31300, HSCI 34500, HSCI 35300, HSCI 41500, HSCI 51400, HSCI 53400, HSCI 54000, and HSCI 57400.

An Ethics course (such as PHIL 11100 Ethics or PHIL 29000 Environmental Ethics) is highly recommended.

Science Selective List for RHAS

AT 57200	Human Error and Safety
BCHM 30700	Biochemistry
CHM 22400	Introductory Quantitative Analysis
CHM 25500	Organic Chemistry for Life Sciences I
CHM 25501	Organic Chemistry for Life Sciences Lab I
CHM 25600	Organic Chemistry for Life Sciences II
CHM 25601	Organic Chemistry for Life Sciences Lab II
CHM 33900	Biochemistry: A Molecular Approach
HSCI 19000, 29000, 39000, 49000, or 59000	Special Topics in Radiological Health Sciences
HSCI 31000	Imaging in Medicine
HSCI 34600 or HSCI 54600	Industrial Hygiene Engineering Control
HSCI 34800 or HSCI 54800	Industrial Hygiene Instrumentation Techniques
HSCI 44400 or HSCI 54400	Exposure Assessment In OEHS
HSCI 52000	Risk Assessment In Environmental Health
HSCI 52600	Principles of Health Physics & Dosimetry
HSCI 54700	Fundamentals of Epidemiology
HSCI 55100	Physical Agents in Environmental Health
HSCI 55200	Introduction to Aerosol Science
HSCI 56000	Toxicology
HSCI 58000	Occupational Biomechanics and Ergonomics
NUCL 50100	Nuclear Engineering Principles
PHIL 27000	Biomedical Ethics
PHIL 29000	Environmental Ethics
PHIL 35000	Philosophy and Probability
PUBH 40500	Principles of Epidemiology

HSCI Humanities, Behavioral/Social Sciences Selective List - select any 10000-59999 course(s) from the following subjects:

American Sign Language (ASL)
Anthropology (ANTH)
Arabic (ARAB)
Art & Design (AD)
Chinese (CHNS)
Classics (CLCS)
Communication (COM)
Dance (DANC)
Economics (ECON)
English (ENGL)
French (FR)
German (GER)
Greek (GREK)
Hebrew (HEBR)
History (HIST)
Interdisciplinary Studies (IDIS)
Italian (ITAL)
Japanese (JPNS)
Korean (KOR)
Latin (LTN)
Music (MUS)
Philosophy (PHIL)
Political Science (POL)
Portuguese (PTGS)
Psychology (PSY)
Russian (RUS)
Sociology (SOC)
Spanish (SPAN)
Theatre (THTR)

Math-Computer Science Selective List

CS 15900	C Programming
CS 18000	Problem Solving and Object-Oriented Programming
CS 31400	Numerical Methods
CS 47800	Introduction to Bioinformatics
ECE 20875	Python for Data Science
MA 41600	Probability
MA 52700	Advanced Mathematics for Engineers and Physicists I
MA 52800	Advanced Mathematics for Engineers and Physicists II
STAT 31100	Introductory Probability
STAT 51200	Applied Regression Analysis

University Foundational Learning Outcomes List: https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html

A student may elect the Pass / Not-Pass (P/NP) grading option for elective courses only, unless an academic unit requires that a specific departmental course/s be taken P/NP. Students may elect to take University Core Curriculum courses P/NP; however, some major Plans of Study require courses that also fulfill UCC foundational outcomes. In such cases, students may not elect the P/NP option. A maximum of 24 credits of elective courses under the P/NP grading option can be used toward graduation requirements. For further information, students should refer to the College of Health and Human Sciences P/NP Policy.

Students are encouraged to use this advising worksheet as a resource when planning progress toward completion of degree requirements. An Academic Advisor may be contacted for assistance in interpreting this worksheet. This worksheet is not an academic transcript, and it is not official notification of completion of degree or certificate requirements. The University Catalog is the authoritative source for displaying plans of study. The student is ultimately responsible for knowing and completing all degree requirement

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Suggested Arrangement of Courses:

Credits	**Fall 1st Year**	**Prerequisite**	Credits	**Spring 1st Year**	**Prerequisite**
4	*BIOL 11000[CC]		4	*BIOL 11100[CC]	BIOL 11000
3	*CHM 11510[CC]	MA 15400 or MA 15800 or ALEKS = 75	3	*CHM 11610[CC]	CHM 11500 or 11510
1	CHM 11520[CC]	CHM 11500 or (CHM 11510 or may be taken concurrently)	1	CHM 11620[CC]	CHM 11520 prerequisite and (CHM 11610 or may be taken concurrently)
3	*COM 11400[CC]		4-3	*ENGL 10600 OR 10800[CC]	
2	HSCI 10100 Fall only		3	MA/CS Selective Select from list	Select from list
3	*MA 16010[CC]	ALEKS = 75 or MA 15400 = C- or 15800 = C-			
16			**14-15**		

Credits	**Fall 2nd Year**	**Prerequisite**	Credits	**Spring 2nd Year**	**Prerequisite**
4	*BIOL 20300[CC] Fall only		4	*BIOL 20400 [CC] Spring only	BIOL 20300
3	*HSCI 20200 Fall only	3 credits in BIOL & CHM	3	*HSCI 20100 Spring only	Classification of 03
3	*Humanities BSS Core Selective		3	HSCI 22500 [CC]	
4	*PHYS 22000 or PHYS 23300 [CC]	College algebra & trig	4	PHYS 22100 or PHYS 23400 [CC]	Phys 22000 or 23300
14			**14**		

Credits	**Fall 3rd Year**	**Prerequisite**	Credits	**Spring 3rd Year**	**Prerequisite**
3	^HSCI 31200 Fall only	MA 16010, 16100, or 16500 & PHYS 22100, 23400, 24100, 27200 or NUCL 20000	2	^HSCI 51400 Spring only	HSCI 31200
2	^HSCI 31300 Fall only	MA 16010, 16100, or 16500 & PHYS 22100, 23400, 24100, 27200 or NUCL 20000	3	^HSCI 54000 Spring only	
3	HSCI 34500 Fall only	CHM 11500 or (CHM 11510 & CHM 11520) & MA 16010	3	Science Selective	Select from list
3	HSCI 35300 Fall only	HSCI 22500	3	Science Selective	Select from list
3	*STAT 30100		3	English Selective	Select any 20000 or above ENGL course
3	HSCI Humanities Sel.	Select from HSCI list			
17			**14**		

Credits	**Fall 4th Year**	**Prerequisite**	Credits	**Spring 4th Year**	**Prerequisite**
3	Science Selective (HSCI 52600 Recommended)	HSCI 31200	3	^HSCI 53400 Spring only	HSCI 31200
2	^HSCI 57400 Fall only	HSCI 31200 & Phys 22100/23400/24100/27200	4	^HSCI 41500 Spring only	HSCI 31200
3	HSCI 48500	HSCI 31200	3-4	Elective	
3	MA/CS or Science Selective	Select from list	3	*Humanities Core Selective	Select from University list
3	Science Selective	Select from list			
3	Elective				
17			**13-14**		

***Satisfies a University Core Requirement.**

[CC]Critical Course – a course that a student must be able to pass to persist and succeed in a particular major.

^A minimum grade of C must be earned in HSCI 31200, 31300, 34500, 35300, 41500, 51400, 53400, 54000, and 57400, and they cannot be taken as pass/no pass.

Students must complete 32 credit hours of 30000 level or higher courses at Purdue University for graduation.

120 semester credits required for Bachelor of Science degree.

An internship or approved experiential learning experience is required as part of HSCI 48500

2.0 Graduation GPA required for Bachelor of Science degree.The student is ultimately responsible for knowing and completing all degree requirements. Degree Works is knowledge source for specific requirements and completion

Fall 2025