

Student: _____ PUID: _____ Catalog Term: Fall 2024

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
- ___ (4) CHM 11500 General Chemistry
- ___ (4) CHM 11600 General Chemistry
- ___ (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
- ___ (3) _____ Math-Computer Science Selective – *select from list*

Health Physics Concentration (51-53 credits)

- ___ (3) HSCI 48500 Health Physics Internship
- ___ (3) HSCI 52600 Principles of Health Physics & Dosimetry (must earn a grade of "C" or higher)
- ___ (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)
- ___ (4-5) MA 16100 Plane Analytic Geometry & Calculus I or MA 16500 Analytic Geometry & Calculus I **[Satisfies Quantitative Reasoning Core]**
- ___ (4-5) MA 16200 Plane Analytic Geometry & Calculus II or MA 16600 Analytic Geometry & Calculus II
- ___ (4) MA 26100 Multivariate Calculus
- ___ (3) NUCL 20000 Introduction to Nuclear Engineering
- ___ (2) NUCL 20500 Nuclear Engineering Undergraduate Laboratory I
- ___ (2) NUCL 30500 Nuclear Engineering Undergraduate Laboratory II
- ___ (4) PHYS 17200 Modern Mechanics
- ___ (3) PHYS 24100 Electricity & Optics
- ___ (1) PHYS 34000 Modern Physics Laboratory
- ___ (3) PHYS 34200 Modern Physics
- ___ (3) _____ General Science or Radiological Health Sciences Selective – *select from list*
- ___ (3) _____ Health Physics Selective – *select from list*
- ___ (4) _____ Math-Computer Science or General 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 or ENGL 10800 Accelerated 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 (0-3 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 51400, HSCI 52600, HSCI 53400, HSCI 54000, and HSCI 57400.

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

General Science Selective List for HLPH

AT 57200 Human Error and Safety
 BIOL 41500 Introduction To Molecular Biology
 BIOL 44400 Human Genetics
 BIOL 51600 Molecular Biology Of Cancer
 BIOL 54200 Modular Upper-Division Laboratory Course
 CHM 22400 Introductory Quantitative Analysis
 CHM 25500 Organic Chemistry
 CHM 25501 Organic Chemistry Laboratory
 CHM 25600 Organic Chemistry
 CHM 25601 Organic Chemistry Laboratory
 HSCI 34500 Introduction To Occupational and Environmental Health Sciences
 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
 PHIL 27000 Biomedical Ethics
 PHIL 29000 Environmental Ethics
 PHIL 35000 Philosophy and Probability
 PHYS 22000 General Physics
 PHYS 22100 General Physics
 PHYS 31000 Intermediate Mechanics
 PHYS 36000 Quantum Mechanics
 PHYS 55000 Introduction To Quantum Mechanics
 PHYS 55600 Introductory Nuclear Physics
 PHYS 56400 Introduction To Elements Particle Physics
 PHYS 56500 Introduction To Elementary Particle Physics II
 PUBH 40500 Principles of Epidemiology

Health Physics Selective List

HSCI 39000 Radiological Emergency Management
 HSCI 41500 Introduction to Nuclear and Radiological Source Security
 HSCI 54700 Fundamentals of Epidemiology
 HSCI 55100 Physical Agents in Environmental Health
 HSCI 55200 Introduction to Aerosol Science
 HSCI 59000 Public Health Law and Policy
 ME 20000 Thermodynamics I
 ME 27000 Basic Mechanics I
 NUCL 30000 Nuclear Structure and Radiation Interactions
 NUCL 31000 Introduction to Neutron Physics
 NUCL 35000 Nuclear Thermal-Hydraulics I
 NUCL 35100 Nuclear Thermal-Hydraulics II
 NUCL 50100 Nuclear Engineering Principles
 NUCL 50300 Radioactive Waste Management
 NUCL 50400 Nuclear Engineering Experiments
 NUCL 51000 Nuclear Reactor Theory I

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 26200 Linear Algebra and Differential Equations
 MA 41600 Probability
 MA 52700 Advanced Mathematics for Engineers and Physicists I
 MA 52800 Advanced Mathematics for Engineers and Physicists II
 PHYS 58000 Computational Physics
 STAT 31100 Introductory Probability
 STAT 51200 Applied Regression Analysis

Radiological Health Sciences Selective List for HLPH

Any course on the Health Physics Selective List
 HSCI 19000, 29000, 39000, 49000, or 59000 - Special Topics in Radiological Health Sciences
 HSCI 30500 Basics of Oncology
 HSCI 31000 Imaging in Medicine
 HSCI 57000 Introduction to Medical Diagnostic Imaging
 HSCI 57200 Radiation Oncology Physics

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 requirements.

Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4	*BIOL 11000 ^{CC}		4	*BIOL 11100 ^{CC}	BIOL 11000
4	*CHM 11500 ^{CC}	MA 15400 or MA 15800 or ALEKS = 75	4	*CHM 11600 ^{CC}	CHM 11200 or 11500
3	*COM 11400 ^{CC}		4-3	*ENGL 10600 OR 10800 ^{CC}	
2	HSCI 10100 Fall only		5-4	*MA 16200 or 16600 ^{CC}	MA 16500 or 16100 = C-
5-4	*MA 16100 or 16500 ^{CC}	ALEKS = 85			
17-18			15-17		

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
4	*MA 26100	MA 16200 or 16600 = C-	3	NUCL 20000 Spring only	MA 16200 or 16600 & PHYS 17200
4	*PHYS 17200 ^{CC}	MA 16100 or 16500 or ALEKS = 85	2	NUCL 20500 ^{CC} Spring only	NUCL 20000 or may be taken concurrently
			1	Elective	
15			13		

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	BIOL 11100 & HSCI 31200
2	NUCL 30500 Fall only	NUCL 20500	3	PHYS 34200	PHYS 24100
3	*PHYS 24100	PHYS 17200	1	PHYS 34000	PHYS 24100 or 34200 may be taken concurrently
3	*STAT 30100		3	*Humanities BSS Core Selective	Select from University list
3	HSCI Humanities Sel.	Select from HSCI list	3	English Selective	Select any 20000 or above ENGL course
16			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	^HSCI 52600 Fall only	HSCI 31200	3	^HSCI 53400 Spring only	HSCI 31200
2	^HSCI 57400 Fall only	HSCI 31200 & PHYS 24100	4	MA/CS Science Selective	Select from list
3	HSCI 48500	HSCI 31200	3	General Science or RADH Sel.	Select from list
3	MA/CS Selective	Select from list	3	*Humanities Core Selective	Select from University list
3	Health Physics Sel.	Select from list			
2	Elective				
16			13		

*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, 51400, 52600, 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.

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.