

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*

Pre-Medical Physics Concentration (48-50 credits)

- ____ (3) HSCI 52600 Principles of Health Physics & Dosimetry
- ____ (3) HSCI 57000 Introduction to Medical Diagnostic Imaging (must earn a grade of "C" or higher)
- ____ (3) HSCI 57200 Radiation Oncology 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 (must earn a grade of "C" or higher) **[Satisfies Quantitative Reasoning Core]**
- ____ (4-5) MA 16200 Plane Analytic Geometry & Calculus II or MA 16600 Analytic Geometry & Calculus II (must earn a grade of "C" or higher)
- ____ (4) MA 26100 Multivariate Calculus
- ____ (4) MA 26200 Linear Algebra & Differential Equations
- ____ (4) PHYS 17200 Modern Mechanics (must earn a grade of "C" or higher)
- ____ (3) PHYS 24100 Electricity & Optics
- ____ (1) PHYS 25200 Electricity & Optics Laboratory
- ____ (1) PHYS 34000 Modern Physics Laboratory
- ____ (3) PHYS 34200 Modern Physics
- ____ (3) _____ Physics Selective – *must be PHYS 30000 or higher (PHYS 31000 Intermediate Mechanics, PHYS 36000 Quantum Mechanics, and/or PHYS 55600 Introductory Nuclear Physics are suggested)*
- ____ (3) _____ Physics Selective – *select any 30000 or above PHYS course*
- ____ (3) _____ Radiological Health Sciences 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 (3-6 credits)

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

An Ethics course (such as PHIL 11100 Ethics, PHIL 27000 Biomedical Ethics, or PHIL 29000 Environmental Ethics) is highly recommended for students pursuing the PRMP concentration.

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 54000, HSCI 57000, HSCI 57200, HSCI 57400; MA 16100/16200 or MA 16500/16600; and PHYS 17200.**

**HSCI Humanities, Behavioral/Social Sciences Selectives 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 & 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 PRMP

AT 57200 Human Error and Safety
BIOL 41500 Introduction To Molecular Biology
BIOL 44400 Human Genetics
BIOL 51600 Molecular Biology Of Cancer
BIOL 54200 Animal Cell Culture
CHM 22400 Introductory Quantitative Analysis
CHM 25500 Organic Chemistry
CHM 25501 Organic Chemistry Laboratory
CHM 25600 Organic Chemistry
CHM 25601 Organic Chemistry Laboratory
ECE 20875 Python for Data Science
ECE 26400 Advanced C Programming
ECE 30100 Signals and Systems
ECE 30200 Probabilistic Methods in Electrical and Computer Engineering
ECE 36800 Data Structures
ECE 36900 Discrete Mathematics for Computer Engineering
ECE 43800 Digital Signal Processing with Applications
ECE 47300 Introduction to Artificial Intelligence
ECE 49595 Selected Topics in Electrical and Computer Engineering Titles: Data Mining Basic Concepts & Techniques; Cameras, Images, and Statistical Inverse Problems
ECE 50024 Machine Learning
ECE 56900 Introduction to Robotic Systems
ECE 59500 Selected Topics in Electrical Engineering Titles: Intro to Deep Learning; Deep Learning for Computer Vision; Natural Language Processing; Introduction to Data Mining
HSCI 30500 Basics of Oncology
HSCI 31000 Imaging in Medicine
HSCI 34500 Introduction To Occupational and Environmental Health Sciences
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 56000 Toxicology
HSCI 58000 Occupational Biomechanics and Ergonomics
PHIL 27000 Biomedical Ethics
PHIL 29000 Environmental Ethics
PHIL 35000 Philosophy and Probability
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

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 |
|-----------|----------------------------|---------------------------------|-----------|-------------------------|---|
| 3 | *HSCI 20200 Fall only | 3 credits in BIOL & CHM | 3 | *HSCI 20100 Spring only | Classification of 03 |
| 4 | *MATH 26100 | MA 16200 or 16600 = C- | 4 | *MA 26200 | MA 26100 = C- |
| 4 | ^*PHYS 17200 ^{CC} | MA 16100 or 16500 or ALEKS = 85 | 3 | *PHYS 24100 | PHYS 17200 |
| 3 | *STAT 30100 | | 1 | PHYS 25200 | PHYS 24100 or may be taken concurrently |
| | | | 3 | HSCI Humanities Sel. | Select from HSCI list |
| 14 | | | 14 | | |

| Credits | Fall 3rd Year | Prerequisite | Credits | Spring 3rd Year | Prerequisite |
|-----------|-------------------------------------|---|-----------|---------------------------------------|-----------------------------|
| 4 | *BIOL 20300 ^{CC} Fall only | | 4 | *BIOL 20400 ^{CC} Spring only | BIOL 20300 |
| 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 |
| 3 | PHYS 34200 | PHYS 24100 | 3 | MA/CS Science Selective | Select from list |
| 1 | PHYS 34000 | PHYS 24100 & 34200 may be taken concurrently | 3 | *Humanities BSS Sel. | Select from University 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 57000 Spring only | HSCI 31200 & MA 26200 |
| 2 | ^HSCI 57400 Fall only | HSCI 31200 & PHYS 24100 | 3 | ^HSCI 57200 Spring only | HSCI 31200 & MA 26100 & PHYS 24100 |
| 3 | Physics Selective | PHYS 31000, 36000, or 55600 suggested | 3 | Physics Selective | PHYS 31000, 36000, or 55600 suggested |
| 3 | *Humanities Selective | Select from University list | 3 | Elective | |
| 3 | RADH HSCI Selective | Select from list | 3 | Elective | |
| 14 | | | 15 | | |

*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, HSCI 31300, HSCI 51400, HSCI 54000, HSCI 57000, HSCI 57200, HSCI 57400; MA 16100/16200 or MA 16500/16600; and PHYS 17200, 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.