

# PHYSICS

## Bachelor of Science (BS)

This is a guide based on the 2025-2026 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

### CURRICULUM CHECKLIST

"Critical Courses" are **italicized and bolded**. Data shows that students who have completed this course in the first two years and have earned the noted grade are most likely to complete this program of study.

#### 47-58 Hour Major - No minor required

##### Required Courses:

- \_\_\_ CH195 Chemistry Seminar I (1)
- \_\_\_ CH295 Chemistry Seminar II (2)
- \_\_\_ PH230/030 General Physics I (5)
- \_\_\_ PH231/031 General Physics II (5)
- \_\_\_ PH345 Experimental Methods I (3)
- \_\_\_ PH360 Modern Physics (3)
- \_\_\_ PH370 Mechanics (3)
- \_\_\_ PH371 Electromagnetics (3)
- \_\_\_ PH477 Physics Seminar (1)
- \_\_\_ PH478 Undergraduate Research (1)
- \_\_\_ PH479 Undergraduate Research (2)

##### Choose one advising track:

##### General Physics

- \_\_\_ PH473 Quantum Mechanics (3)
- \_\_\_ PH570 Mathematical Physics (3)
- \_\_\_ XXxxx Technical electives (300-599) (12)\*

##### Pre-Medical Physics

- \_\_\_ BI173/073 Cell and Organismal Biology (4)
- \_\_\_ BS113/013 Anatomy & Physiology I (4)
- \_\_\_ BS114/014 Anatomy & Physiology II (4)
- \_\_\_ CH341 Foundations of Organic Chemistry (4)
- \_\_\_ CH342 Organic Chemistry Lab I (1)
- \_\_\_ Physics elective (300-599) (3)
- \_\_\_ XXxxx Technical electives (300-599) (9)\*

##### Computational Physics

- \_\_\_ CS155 Computer Science I (3)
- \_\_\_ CS265 Computer Science II (3)
- \_\_\_ CS300 Computer Science III (3)
- \_\_\_ CS351 C & the Posix Environment (3)
- \_\_\_ PH473 Quantum Mechanics (3)
- \_\_\_ PH570 Mathematical Physics (3)
- \_\_\_ XXxxx Technical electives (300-599) (6)\*

##### Additional Requirements: 30 Hours

- \_\_\_ CH184 General Chemistry I Lab (1)
- \_\_\_ CH185 General Chemistry I (3)
- \_\_\_ CH186 General Chemistry II (3)
- \_\_\_ CH187 General Chemistry II Lab (1)
- \_\_\_ CS101 Introduction to Computer Programming (3)
- \_\_\_ **MA140 Analytic Geometry & Calculus I (5)**
- \_\_\_ MA145 Analytic Geometry & Calculus II (4)
- \_\_\_ MA244 Analytic Geometry & Calculus III (4)
- \_\_\_ MA345 Linear Algebra (3)
- \_\_\_ MA350 Differential Equations (3)

\*Choose from BI/BS/CH/CS/EP/EV/ET/MA/MN/PH 300-599 with advice of advisor.

#### General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

### SAMPLE FOUR-YEAR PLAN

|                    | Fall Semester     |              | Spring Semester          |              |
|--------------------|-------------------|--------------|--------------------------|--------------|
|                    | Course #          | Hrs          | Course #                 | Hrs          |
| <b>FIRST YEAR</b>  | UI100             | 1            | CH186                    | 3            |
|                    | CH184             | 1            | CH187                    | 1            |
|                    | CH185             | 3            | CH195                    | 1            |
|                    | CS101             | 3            | MA145                    | 4            |
|                    | <b>MA140</b>      | <b>5</b>     | PH230/030                | 5            |
|                    | General Education | 3            |                          |              |
| <b>Total</b>       | <b>16</b>         | <b>Total</b> | <b>14</b>                |              |
| <b>SECOND YEAR</b> | MA244             | 4            | CH295                    | 2            |
|                    | PH231/031         | 5            | MA345                    | 3            |
|                    | Track course      | 3-4          | MA350                    | 3            |
|                    | General Education | 3            | PH360                    | 3            |
|                    |                   |              | General Education        | 3            |
| <b>Total</b>       | <b>15-16</b>      | <b>Total</b> | <b>14</b>                |              |
| <b>THIRD YEAR</b>  | PH345             | 3            | PH371                    | 3            |
|                    | PH370             | 3            | PH478                    | 1            |
|                    | Track Course      | 3-4          | Track Course             | 3-4          |
|                    | General Education | 3            | Track Course or Elective | 2-4          |
|                    | General Education | 3            | General Education        | 3            |
|                    |                   |              | Elective                 | 2-3          |
| <b>Total</b>       | <b>15-16</b>      | <b>Total</b> | <b>14-18</b>             |              |
| <b>FOURTH YEAR</b> | PH477             | 1            | Track Course             | 3-4          |
|                    | PH479             | 2            | Track Course or Elective | 2-4          |
|                    | Track Course      | 3-4          | General Education        | 3            |
|                    | Track Course      | 3-4          | General Education        | 3            |
|                    | General Education | 3            | Elective                 | 2-3          |
|                    | Elective          | 4            |                          |              |
|                    | <b>Total</b>      | <b>16-18</b> | <b>Total</b>             | <b>13-17</b> |

**Degree requirements for all students:** a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

A minimum 2.0 GPA in the major and overall are required to graduate with a BS degree.

Revised  
3/3/2025

# 2025-2026 degree map

