

Bachelor of Science in Physics

Degree Map & Planning Information

Admissions Information

This program is a declarable major. If you meet the minimum requirements listed below, you may submit a major declaration form through the UWB website.

Minimum requirements for current UW Bothell students:

- Completion of STMATH 124 and STMATH 125 with a 2.0 or higher
- Completion of B PHYS 121, B PHYS 122, and B PHYS 123 with a 2.0 or higher

Curriculum Information

General Education

To be eligible for graduation from the University, with the baccalaureate degree, a student must complete a minimum of 180 academic credits and satisfy all other specific requirements. The University of Washington Bothell has established minimum general education requirements for baccalaureate degrees. These minimum requirements are:

English Composition – 5 credits (A minimum grade of 2.0 is required)

Additional Writing – 10 credits

Reasoning (RSN) – 5 credits

Natural Sciences (NSc) – 15 credits

Arts and Humanities (A&H) – 15 credits

Social Sciences (SSc) – 15 credits

Diversity – 5 credits (can overlap with General Education requirements above)

Major Requirements

For the Physics (BS) major, students must complete the following courses with the following grades (where indicated):

STEM Core Courses – 100 credits

Mathematics (30 credits)

- Calculus I – STMATH 124 (5 credits)
- Calculus II – STMATH 125 (5 credits)
- Calculus III – STMATH 126 (5 credits)
- Differential Equations – STMATH 207 (5 credits)
- Matrix Algebra – STMATH 208 (5 credits)
- Multivariate Calculus – STMATH 224 (5 credits)

Physics (66 credits)

- Mechanics – B PHYS 121 (5 credits)
- Electromagnetism & Oscillatory Motion – B PHYS 122 (5 credits)
- Waves – B PHYS 123 (5 credits)
- Classical Mechanics – B PHYS 221 (5 credits)
- Modern Physics – B PHYS 222 (5 credits)
- Thermal Physics – B PHYS 224 (5 credits)
- Introduction to Experimental Physics – B PHYS 231 (5 credits)
- Electricity & Magnetism I – B PHYS 321 (5 credits)
- Electricity & Magnetism II – B PHYS 322 (5 credits)
- Quantum Mechanics I – B PHYS 324 (5 credits)
- Senior Project – B PHYS 433 (5 credits)
- Physics, Society & Industry – B PHYS 484 (5 credits)
- Physics Seminar – B PHYS 494 (1 credit)
- One course from the Experimental Physics requirement – B PHYS 431, 432, or 450 (5 credits)

Computer Science (4 credits)

- Intro to Programming for Scientific Applications – CSS 112 (4 credits)

Approved Physics Electives – 20 credits

Sample 4-year Course Plan

Year 1

Autumn	Winter	Spring	Summer
B PHYS 121 (5)	B PHYS 122 (5)	B PHYS 123 (5)	
B CORE (5-A&H or SSc)	STMATH 125 (5)	STMATH 126 (5)	
STMATH 124 (5)	B WRIT 134 (5)	B WRIT 135 (5)	

Year 2

Autumn	Winter	Spring	Summer
B PHYS 222 (5)	B PHYS 224 (5)	B PHYS 221 (5)	
STMATH 207 (5)	STMATH 208 (5)	STMATH 224 (5)	
A&H or SSc (5)	A&H or SSc (5)	CSS 112 (4)	

Year 3

Autumn	Winter	Spring	Summer
B PHYS 494 (1)	B PHYS 322 (5)	B PHYS Elective (5)	
B PHYS 231 (5)	B PHYS 324 (5)	B PHYS Elective (5)	
B PHYS 321 (5)	A&H or SSc (5)	Elective (5)	

A&H or SSc (5)			
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Year 4

Autumn	Winter	Spring	Summer
B PHYS 484 (5)	B PHYS 431, 432, or 450	B PHYS 433 (5)	
DIV (5)	B PHYS Elective (5)	B PHYS Elective (5)	
Elective (5)	A&H or SSc (5)	Elective (5)	

This is a sample schedule of courses based on degree requirements. The actual degree plan may differ depending on the course of study selected, the number of starting credits, or the starting admission point. This guide is not a substitute for academic advising. For more information, contact your academic advisor or visit www.uwb.edu/advising.