## **Physics**

WIVERSITY of WASHINGTON | BOTHELL

SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

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- This is a suggested 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. Please review degree audit carefully.
- This guide is not a substitute for academic advising or the degree audit. Contact your academic advisor with questions about scheduling, unique interests, or degree requirements.
- Competitive applicants to Physics will have the following: 1. All prerequisites completed, 2. 3.0 grade in each prerequisite, 3. Cumulative GPA of 3.0. Most applicants who satisfactorily meet prerequisites are typically (but not always) admitted.
- All classes are 5 credits unless followed by a parenthesis with a number, indicating the number of credits.
- Refer to the time schedule for up to date course offerings; including quarters, days and times

Y e r 1	Autumn	Winter	Spring
	◊ B PHYS 121 - Mechanics	◊ B PHYS 122 – Electromagnetism	◊ B PHYS 123 – Waves
	◊ STMATH 124 – Calculus I	◊ STMATH 125 – Calculus II	✓ STMATH 126 Calculus III
	♦ A & H	✤ SSc	✓ CSS 112 Intro Programming Scientific Applications (4 credits)

Calculus II (STMATH 125) is a prerequisite for Differential Equations (STMATH 207) and Matrix Algebra (STMATH 208). Calculus III is a prerequisite for Multivariable Calculus (STMATH 224). STMATH 207 is a prerequisite for BPHYS 222 and BPHYS 221, but may be taken concurrently.

Y e r 2	Autumn	Winter	Spring
	B WRIT 134 Composition	B WRIT 135 Research Writing (or other 5 credit "W" course)	✓ B PHYS 221 Classical Mechanics
	B PHYS 222 Modern Physics	B PHYS 224 Thermal Physics	B PHYS elective
	✓ STMATH 207 Differential Equations (prerequisite for B PHYS 222 but may be taken concurrently)	✔STMATH 208 Matrix Algebra	✓ STMATH 224 Multivariable Calculus

Completion 200-level Physics (BPHYS 224, 222, 221), 200-level Math (STMATH 207, 208, 224); strongly recommended to review 300- or 400-level Physics coursework to determine prerequisites for those classes.

Y e a r 3	Autumn	Winter	Spring
	B PHYS 231 Introduction to Experimental Physics (3 credits)	B PHYS 322 Electricity & Magnetism II	B PHYS Elective
	B PHYS 321 Electricity & Magnetism I	B PHYS 324 Quantum Mechanics I	Elective/Minor Coursework
	B PHYS 494 Seminar (C/NC; 1 credit)	Elective/Minor Coursework	SSc/ Diversity (DIV) course
	A & H		

Intro to Experimental Physics (BPHYS 231) is the prerequisite for Experimental Physics Lab I & II (BPHYS 431 or BPHYS 432). BPHYS 231 and 431 only offered in Autumn, so take BPHYS 231 no later than autumn of year 3 to stay on track for 4-year degree completion. Please note: students must select one course: BPHYS 431 (AUT) or BPHYS 432 (WIN) or BPHYS 450 (WIN)

Y e r 4	Autumn	Winter	Spring		
	B PHYS Elective (recommended BPHYS 317, a prerequisite for BPHYS 450)	BPHYS 450 or 432 (if not BPHYS 431 in AUT)	B PHYS Elective		
	B PHYS 431 Experimental Physics Lab I (or in WIN BPHYS 450 or BPHYS 432)	A & H	B PHYS 433 Senior Project		
	B PHYS 484 Physics in Society and Industry (also a "W" and "SSc")	Elective/Minor Coursework	Elective/Minor Coursework		
		Elective/Minor Coursework (2 credits;			
		BPHYS 498/499 encouraged if preparation			
		is needed for Senior Project)			

fulfilled with Discovery Core • Prerequisite: Required to apply for major ✓ milestones: Courses & requirements needed to progress.

This Map is a suggested sequence of the current curriculum which may be altered to carry out the academic objectives of the University. The University specifically reserves the right to change the student's current map at any time within the student's period of study. Last updated: 09/22/2022