

PHYSICS (BS)

Physics

*Suggested Four-Year Flowcharts are planning guides and do not represent a required course sequence.
Courses may be completed in a different order, provided requisite requirements are satisfied.*

First Year

Term 1		Units
PHYS 1100	Introduction to the Physics Major	1
CHEM 1120	Fundamentals of Chemical Structure and Properties	4
MATH 1261	Calculus I (2) ¹	4
General Education Requirement (1A)		3
General Education Requirement (1C)		3

Units **15**

Term 2		Units
PHYS 1141	General Physics I (5A & 5C) ¹	4
CSC 1001 & 1001L	Fundamentals of Computer Science and Fundamentals of Computer Science Laboratory	4
MATH 1262	Calculus II	4
General Education Requirement (1B)		3

Units **15**

Second Year

Term 1		Units
PHYS 1143	General Physics II ²	4
MATH 2263	Calculus III	3
General Education Requirement		3
General Education Requirement		3
General Education Requirement		3

Units **16**

Term 2		Units
PHYS 2211	General Physics III: Modern Physics	4
MATH 2341	Linear Analysis	4
General Education Requirement		3
General Education Requirement		3
General Education Requirement		3

Units **17**

Third Year

Term 1		Units
PHYS 3305	Classical Mechanics I (Upper-Division 2/5) ¹	3
PHYS 3316	Instrumentation and Techniques of Experimental Physics ²	4
PHYS 3320	Methods of Theoretical Physics	4
Technical Elective ^{2,3}		4

Units **15**

Term 2		Units
PHYS 3301	Statistical Mechanics	3
PHYS 3339	Communicating Physics	1
PHYS 3340	Quantum Physics Laboratory I ²	1
PHYS 4408	Electromagnetic Fields and Waves I	3
General Education Requirement		3
Free Elective ⁴		3

Units **14**

Fourth Year

Term 1		Units
PHYS 3341	Quantum Physics Laboratory II ²	1
PHYS 4405	Quantum Mechanics I	3
PHYS 4461 or PHYS 4461 and PHYS 4462	Senior Project I or Senior Project I and Senior Project II	2
Technical Elective ^{2,3}		3
Technical Elective ^{2,3}		3
General Education Requirement		3

Units **15**

Term 2		
PHYS 3323	Optics ²	4
or PHYS 4425	or Solid State Physics	
or PHYS 4428	or Nonlinear Dynamics and Chaos	
or ASTR 4444	or Observational Astronomy	
Technical Elective ^{2,3}		3
Technical Elective ^{2,3}		3
Technical Elective ^{2,3}		3
	Units	13
	Total Units	120

¹ Required in Major or Support; also satisfies General Education (GE) requirement.

² Major courses with lab component may not be taken as CR/NC grading: PHYS 1143, PHYS 3316, PHYS 3323, PHYS 3340, PHYS 3341, PHYS 4428, ASTR 4444, or EE 4422.

³ Total combined elective credit in PHYS 4400, PHYS 4404, ASTR 4400, ASTR 4404, GEOL 4400, and GEOL 4404 limited to 4 units.

⁴ If a General Education (GE) course is used to satisfy a Major or Support requirement, additional units of Free Electives may be needed to complete the total units required for the degree.