PHYSICS MAJOR (PHYS.BS)

Required Courses		Hrs.	Prereq.	Rec.Yr.
PHYS 151L	Gen Physics I Lab	1	Coreq PHYS 151 or 161	Fr
PHYS 152L	Gen Physics II Lab	1	Coreq PHYS 152 or 162	Fr
PHYS 161	General Physics I w/Calculus	3	Pre or coreq MATH 161	Fr
PHYS 162	General Physics II w/Calculus	3	Pre or coreq MATH 161	Fr
PHYS 210	Light & Atomic Physics	3	MATH 161,PHYS 152 or 162; Coreq PHYS 211L	Soph
PHYS 211L	Light & Atomic Phys Lab	1	Coreq PHYS 210	Soph
PHYS 220	Nuclear Physics	3	PHYS 210; Coreq PHYS 221L	Soph
PHYS 221L	Nuclear Physics Lab	1	Coreq PHYS 220	Soph
PHYS 305L	Electro-Optics Lab	1	PHYS 210	Jr
PHYS 310	Analytical Mechanics	3	MATH 162, PHYS 151 or 161, 152 or 162	Jr
PHYS 340	Engineering Thermodynamics	3	MATH 161, PHYS 151 or 161	Jr
PHYS 342	Quantum Mechanics	3	PHYS 151 or 161, 152 or 162, MATH 162	Jr
PHYS 360	Electromagnetic Theory	3	PHYS 161, 162; Pre or coreq MATH 230	Jr
PHYS 401	Final Year Portfolio Showcase	1	Coreq PHYS 498	Sr
^PHYS 497	Research Seminar I	1	Physics Major	Sr
^PHYS 498	Research Seminar II	1	PHYS 497	Sr
Take two of the following PHYS options plus labs				
PHYS 250	Analog Electronics +	3	PHYS 152 or 162, MATH 161 Coreq PHYS 251L	Soph
PHYS 251L	Analog Electronics Lab	1	Coreq PHYS 250	Soph
PHYS 260	Digital Electronics +	3	PHYS 152 or 162; Coreq PHYS 261L	Soph
PHYS 261L	Digital Electronics Lab	1	Coreq PHYS 260	Soph
PHYS 320	Materials Science +	3	PHYS 152 or 162, MATH 161 Coreq PHYS 321L	Jr
PHYS 321L	Materials Science Lab	1	Coreq PHYS 320	Jr
PHYS 330	Solid State Physics +	3	PHYS 152 or 162, MATH 162 Coreq PHYS 331L	Jr
PHYS 331L	Solid State Physics Lab	1	Coreq PHYS 330	Jr
CHEM 161	Accel Gen Chem for Sci Majors	3	HS Chemistry and proficiency or CHEM 105, 107L; Coreq CHEM 163L	Fr
CHEM 163L	Accel Gen Chem for Sci Maj Lab	1	Coreq CHEM 161	Fr
	OR			
CHEM 131	Gen Chemistry Sci Majors I	3	Coreq CHEM 133L	Fr
	Prerequisite: Must have passed at least one year of high school chemistry or one semester of college chemistry equivalent to CHEM 105/107L or above AND at least one of the following: MATH ACT score of 20, MATH SAT score of 500, grade of C or better in one of the classes: MATH 103, 110, 112, 115, 130, 161.			
CHEM 133L	Gen Chemistry Sci Maj I Lab	1	Coreq CHEM 131	Fr
	AND			
CHEM 132	Gen Chemistry Sci Majors II3		C- or better in CHEM 131, 133L; Coreq CHEM 134L	Fr
CHEM 134L	Gen Chemistry Sci Maj II Lab	1	Coreq CHEM 132	Fr
CSCI 230	Scientific Programming	3	PHYS 152 or 162; MATH 162	Soph
MATH 161	Calculus I	4	C or better in MATH 130 or equiv. or placement	Fr
MATH 162	Calculus II	4	C (2.0) or better in MATH 161	Fr
MATH 223	Calculus III	4	C (2.0) or better in MATH 162	Soph
MATH 230	Differential Equations	4	C (2.0) or better in MATH 162	Soph
MATH 311	Applied Linear Algebra	3	Pre or coreq: MATH 223	Jr

66-70 total hours

^Satisfies advanced writing requirement

NAME: _____

B.S. Degree: Physics Major (for students entering in Fall 2026/Spring 2027)

In the "WHAT" column, enter the specific course number when applicable--e.g. HIST 121. In the "WHEN" column, enter the term and year in which the requirement is satisfied--e.g., sp '20.

Liberal Arts Core

WHAT	WHEN	
	_____	ENGL 101* w/ C (2.0) [3 hrs]
	_____	ENGL 110 w/ C (2.0)* [3 hrs]
	_____	COMM 211 w/ C (2.0) [3 hrs]
		Dept senior seminar/writing course
		Met by: _____ PHYS 497 [1 hr]
		AND _____ PHYS 498 [1 hr]
	_____	FYEX 101 [3 hrs]
	_____	FYEX 102 [1 hr]
_____	_____	FYEX 103/104/105/106/107 [1 hr]
_____	_____	FYEX 103/104/105/106/107 [1 hr]
_____	_____	Foundational Scientific Inquiry [3-4 hrs]
_____	_____	Foundational Quantitative Analysis [3-4 hrs]
_____	_____	Foundational Humanities & Liberal Arts [3 hrs]

No more than two lens courses may come from same departmental prefix and one lens must be taken at 300 level or above.

_____	_____	Ethical/Spiritual Explor Lens (ETSP) [3 hrs]
_____	_____	Aesthetic Expression Lens (AEXP) [3 hrs]
_____	_____	Per & Soc Well Being Lens (PSWB) [3 hrs]
_____	_____	Cultural Perspectives Lens (CEXP) [3 hrs]
_____	_____	Experimental Inquiry Lens (EXIN) [3 hrs]
		39 - 41 Total semester hours
	_____	120 semester hours required for graduation

*Enter NA (not applicable) if waived upon admission

For students classified as transfers, FYEX course requirements are dependent upon total transferrable credit hours.

Physics Major

WHAT	WHEN	
	_____	PHYS 151L [1 hr]
	_____	PHYS 152L [1 hr]
	_____	PHYS 161 [3 hrs]
	_____	PHYS 162 [3 hrs]
	_____	PHYS 210 [3 hrs]
	_____	PHYS 211L [1 hr]
	_____	PHYS 220 [3 hrs]
	_____	PHYS 221L [1 hr]
	_____	PHYS 305L [1 hr]
	_____	PHYS 310 [3 hrs]
	_____	PHYS 340 [3 hrs]
	_____	PHYS 342 [3 hrs]
	_____	PHYS 360 [3 hrs]
	_____	PHYS 401 [1 hr]
	_____	PHYS 497 [1 hr]
	_____	PHYS 498 [1 hr]

Take two of the following PHYS options:

_____	PHYS 250 [3 hrs]+PHYS 251L [1 hr]
_____	PHYS 260 [3 hrs]+PHYS 261L [1 hr]
_____	PHYS 320 [3 hrs]+PHYS 321L [1 hr]
_____	PHYS 330 [3 hrs]+PHYS 331L [1 hr]
_____	CHEM 161 [3 hrs]
_____	CHEM 163L [1 hr]
	OR
_____	CHEM 131/133L [4 hrs]
_____	CHEM 132/134L [4 hrs]
_____	CSCI 230 [3 hrs]
_____	MATH 161 [4 hrs]
_____	MATH 162 [4 hrs]
_____	MATH 223 [4 hrs]
_____	MATH 230 [4 hrs]
_____	MATH 311 [3 hrs]
_____	66-70 semester hours

➢Except in specifically approved majors, a maximum of 52 hours in an academic discipline may count toward graduation. Three hours over the limit may count to accommodate an internship in the discipline.

➢ Only six hours of any minor may overlap with the required credit hours of a student's chosen major. The overlap constraint is not applicable to courses that majors or minors MUST take in others departments.