

PHYSICS (B.S.) GENERAL

Curriculum Map

Course	Title	Hours
Freshman		
Fall		
CHEM 141 & CHML 141	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LAB	4
ENG 104 or ENG 103 or ENG 111	COMPOSITION I or English Composition I with Co-requisite Support or COMPOSITION & LITERATURE FOR L	3
MATH 241	CALCULUS I WITH LABORATORY	3
PHY 198	PHYSICS STUDENT SEMINAR	0.5
UNIV 100	UNIVERSITY SUCCESS	2
Humanities & Fine Arts Option		3
Hours		15.5
Spring		
CHEM 142 & CHML 142	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LAB	4
ENG 105 or ENG 112	COMPOSITION II or COMPOSITION	3
MATH 242	CALCULUS II WITH LABORATORY	3
PHY 199	PHYSICS STUDENT SEMINAR	0.5
Pathway Option		3
PHY 211 & PHYL 211	General Physics I and GENERAL PHYSICS LAB I	4
Hours		17.5
Sophomore		
Fall		
BIO 111 & BIOL 111	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
MATH 243	CALCULUS III WITH LABORATORY	3
PHY 212 & PHYL 212	General Physics II and GENERAL PHYSICS LAB II	4
PHY 298	PHYSICS STUDENT SEMINAR	0.5
Pathway Option		3
Hours		14.5
Spring		
MATH 244	CALCULUS IV WITH LABORATORY	3
PHY 216	MODERN PHYSICS	3
PHY 299	PHYSICS STUDENT SEMINAR	0.5
PHY 297	Research Methods in Physics	2
UNIV 200	CIVIC ENGAGEMENT	1
Humanities & Fine Arts Option		3
Pathway Option		3
Hours		15.5
Junior		
Fall		
PHY 311	THEORETICAL MECHANICS I	3
PHY 351	THERMAL PHYSICS	3
PHY 361	MATH MET OF PHYSICS & CHEMISTRY	3
PHY 398	PHYSICS STUDENT SEMINAR	0.5
Physics Elective		3
Social & Behavioral Science Option		3
Hours		15.5
Spring		
PHY 312	THEORETICAL MECHANICS II	3
PHY 330	METHODS OF EXPERIMENTAL PHYSICS	3
PHY 342	OPTICS SPECTRA & LASERS	3
PHY 362	MATH MET OF PHYSICS & CHEMISTRY	3
PHY 399	PHYSICS STUDENT SEMINAR	0.5

Social & Behavioral Science Option		3
Hours		15.5
Senior		
Fall		
PHY 411	ELECTROMAGNETIC THEORY I	3
PHY 422	QUANTUM MECHANICS	3
PHY 498	PHYSICS STUDENT SEMINAR	0.5
Physics Elective		3
Restricted Electives		3
General Elective		3
Hours		15.5
Spring		
PHY 412	ELECTROMAGNETIC THEORY II	3
PHY 431	ATOMIC & NUCLEAR PHYSICS	3
PHY 499	PHYSICS STUDENT SEMINAR	0.5
Humanities & Fine Arts Option		3
Restricted Elective		3
Hours		12.5
Total Hours		122

Notes:

- Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100 UNIVERSITY SUCCESS; however, the student must take 2 hours of general electives to replace the UNIV course.
- Online Graduation Clearance (**to be completed during the graduating semester only**).

Code	Title	Hours
Restricted Elective Course Options:		
ECE 220	CIRCUIT THEORY	3
ECEL 220	CIRCUITS LABORATORY	1
ECE 320	CIRCUIT THEORY II	3
ECE 330	ELECTRONICS	3
ECEL 330	ELECTRONICS LABORATORY	1
ECE 331	ELECTRONICS II	3
ECE 335	SEMICONDUCTOR DEVICES	3
ECE 345	ELECTROMAGNETIC FIELDS	3
ECE 480	POWER SYSTEM ANALYSIS	3
ECE 481	ELECTRIC MACHINES	3
CSC 118	COMPUTER SCIENCE I	3
CSC 119	COMPUTER SCIENCE II	3
CSC 215	DATA ANALYTICS	3
CSC 225	DISCRETE STRUCTURES	3
CSC 228	DATA STRUCTURES & ALGORITHMS	3
CSC 235	SECURITY AWARENESS	3
CSC 245	INTRODUCTION TO BIOINFORMATICS	3
CSC 330	DATABASE SYSTEMS	3
Any Math course that is MATH 240 or higher		3-4