

Major Fact Sheet

Physics, BS

What will I be studying?

Physics is vital to understanding the world around us, the world inside us, and the world beyond us. The BS program consists of the traditional general physics core, a variety of upper-level courses and applied electives, laboratory courses, and undergraduate research. It is designed for students wanting to pursue graduate programs in physics.

Career Ideas!

Physicist/Researcher/Faculty (PhD)

Plan and conduct scientific research, experiments, and studies to test theories and to discover properties of matter and energy.

Engineering Connected

Use math and science to solve different technical problems; develop new products for companies or individuals.

Educator/Teacher (Secondary)

Teach courses pertaining to the laws of matter and energy; includes both teachers primarily engaged in teaching and those who do a combination of teaching and research.

Explore more career services at USF!





Science Center (SCA) 203



PhysicsAdvise@usf.edu





Contact Us

Society of Physics Students at USF

Astronomy Club at USF

Sigma Pi Sigma

American Physical Society

The American Institute of Physics

Get Involved!

Department of Physics Physics, BS

Example Four Year Plan

Year 1		
Fall	Spring	Summer
CHM 2045: Chemistry 1**	CHM 2046: Chemistry 2	Non-Major Elective
CHM 2045L: Chemistry 1 Lab **	CHM 2046L: Chemistry 2 Lab	
ENC 1101: Composition 1	MAC 2311: Calculus 1**	
Core Humanities	ENC 1102: Composition 2	
Core Social Science Course	Enhanced Gen-Ed: Human/Cultural Diversity	
Total Hours: 13	Total Hours: 14	Total Hours: 3
	Year 2	
Fall	Spring	Summer
MAC 2312: Calculus II	MAC 2313: Calculus III	Non-Major Elective
PHY 2048: Calc-Based Physics I	PHY 2049: Calc-Based Physics II	
PHY 2048L: Calc-Based Physics I Lab	PHY 2049L: Calc-Based Physics II Lab	
Enhanced Gen-Ed: Creative Thinking	Enhanced Gen-Ed: Info & Data Literacy	
Non-Major Elective	Non-Major Elective	
Total Hours: 14	Total Hours: 14	Total Hours: 3
	Year 3	
Fall	Spring	Summer
PHY 3101: Modern Physics	PHY 3220: Classical Mechanics	PHY 4910 Undergraduate Research
PHY 3822L: Intermediate Lab	PHY 3323: Electricity & Magnetism I	Non-Major Elective
PHZ 3113: Math Methods	PHY 4823L: Advanced Lab	
Enhanced Gen-Ed: Ethical Reasoning & Civic Engagement	Enhanced Gen-Ed: High Impact Practice	
Non-Major Elective	Upper-Level Non-Major Elective	
Total Hours: 15	Total Hours: 16	Total Hours: 5
	Year 4	
Fall	Spring	Total Credits to Graduation
PHY 4604: Intro to Quantum Mechanics	PHY 4605: Quantum Mechanics II	Major Requirements: 68 credit hours
PHY 4324: Electricity & Magnetism II	PHY 4523: Statistical Physics	
Upper-Level Physics Major Elective	PHY 4930: Physics Seminar	General Education Requirements: 27 credit hours
Non-Major Elective	Upper-Level Physics Major Elective	
	Non-Major Elective	Other Degree Requirements: 25 credit hours
Total Hours: 12	Total Hours: 13	Total= 120

^{**}May require completion of additional math pre-requisites (consider the MPT or CPT exams)