

Degree Requirements: Physics (385)-Bachelor of Science

School of Arts and Sciences

Department of Chemistry, Physics, and Engineering Catalog Year: 2023-2025

NOTE: As of Fall 2023, this program is in teach out; no new students will be admitted.

General Education Requirements (44-46 hours)					
Communication (9 hours)	American History (3 hours)	Behavioral Science (3 hours)			
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113			
Mathematics (3-5 hours)	Political Science (3 hours)	Economics (3 hours)			
MATH 2215	PS 1113	AGRC 2013, ECON 2003, ECON 2013,			
		GEOG 3023			
Science* (8-9 hours)	Humanities* (6 hours)	Health and Wellness* (4 hours)			
Biological Science (4 hours)	Diversity (3 hours)	SES 2003, 2013, 2023, MSL 1112,			
Physical Science: CHEM 1361/1364	Aesthetics (3 hours)	PE 11, 21, 22			
*One course must be a lab science.	*One course taken from each category.	*Requirement waived for some students.			

General Education Non-PE Electives (To total at least 44 hours, if needed)*.

Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).

University Requirements				
UNIV 1001 or 1113 (1-3 hours)	Computer Literacy (PHYS 3011)		Capstone Experience (PHYS 4541)	
Major Requirements (40 hours)				
Required Courses (32 hours)		Other Electives (8 hours)		
PHYS 1115/L Physics /Lab I (FA) OR PH	YS 2015/L Physics I	CHEM 4353 Physica		
for Science/Engineering Majors/Lab (SP)		CHEM 4363 Physical Chemistry II		
PHYS 1215/L Physics II/Lab (SP) OR PHYS 2025/L Physics		ENGR 2213 Thermodynamics		
II for Science/Engineering Majors/Lab (FA)		ENGR 2223 Fluid Mechanics		
PHYS 2541 Intro to Physics Literature (Even FA)		ENGR 2533 Dynamics		
PHYS 3003 Modern Physics (SP)		ENGR 2713 Digital Signals and Filtering		
PHYS 3011 Modern Physics Lab (SP)		ENGR 2723 Electrical Circuits		
PHYS 3043 Intro to Quantum Mechanics (Even SP)		PHYS 3031 Electrical Measurements and Electronics Lab		
PHYS 3303 Classical Mechanics (Even FA)		PHYS 3024 Electrical Measurements and Electronics		
PHYS 3403 Thermal Physics (Odd FA)		PHYS 4243 Solid State Physics		
PHYS 4113 Electricity and Magnetism (Odd SP)		PHYS 4481-3 Advanced Topics in Physics		
PHYS 4401 Optics Lab (FA)		PHYS 4491-3 Special Problems		
PHYS 4403 Light and Optics (FA)		NOTE: Students must maintain an overall 2.0 GPA for all Major		
PHYS 4541 Physics Capstone (SP)		Requirements.		
FA=Fall; SP=Spring; SU=Summer				

Additional Requirements (21 hours)

CHEM 1471/1474 General Chemistry II/Lab CS 1314/L Computer Science I/Lab (or similar) MATH 2235 Calculus & Analytic Geometry II MATH 2244 Calculus & Analytic Geometry III MATH 3253 Differential Equations

Depending upon high school background some students may also need: MATH 0013, 0103, 0213 and/or 0115, MATH 1513, MATH 1613 as prerequisites. Some of these courses may be used to satisfy general education requirements.

Minor Requirements (18 hours)

A <u>full list of available minors</u> is available on the CU website.

General Electives (To Complete 124 hours)

Graduation Requirements

Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum 1/2 of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online