



**Degree Requirements: Physics (385)–Bachelor of Science**

School of Arts and Sciences

Department of Chemistry, Physics, and Engineering

Catalog Year: 2019-2021

<b>General Education Requirements (44–46 hours)</b>		
<b>Communication (9 hours)</b>	<b>American History (3 hours)</b>	<b>Behavioral Science (3 hours)</b>
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOVI 1113, HON 2133
<b>Mathematics (5 hours)</b>	<b>Political Science (3 hours)</b>	<b>Economics (3 hours)</b>
MATH 2215	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
<b>Science* (9 hours)</b>	<b>Humanities (6 hours)</b>	<b>Health and Wellness* (4 hours)</b>
Biological Science (4 hours) Physical Science: CHEM 1361/1364 *One course must be a lab science; see Gen Ed course list.	Diversity (3 hours) Aesthetics (3 hours) *One course must be taken from each category; see Gen Ed course list.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students; see Gen Ed course list.
<b>General Education Electives (To total at least 44 hours, if needed)*.</b>		
*Must be selected from the list of approved <a href="#">general education</a> courses (MSL and PE prefixes excluded).		
<b>University Requirements</b>		
UNIV 1001 or 1113–1–3 hours	Computer Literacy–PHYS 3011	Capstone Experience–PHYS 4541
<b>Major Requirements (40 hours)</b>		
<b>Required Courses (32 hours)</b>	<b>Other Electives (8 hours)</b>	
PHYS 1115/L Physics I (FA) <b>OR</b> PHYS 2015/L Physics I for Science/Engineering Majors (SP) PHYS 1215/L Physics II (SP) <b>OR</b> PHYS 2025/L Physics II for Science/Engineering Majors(FA) PHYS 2541 Intro to Physics Literature (FA) PHYS 3003 Modern Physics (SP) PHYS 3011 Modern Physics Lab (SP) PHYS 3043 Intro to Quantum Mechanics (Even SP) PHYS 3303 Classical Mechanics (Even FA) PHYS 3403 Thermal Physics (Odd FA) PHYS 4113 Electricity and Magnetism (Odd SP) PHYS 4401 Optics Lab (FA) PHYS 4403 Light and Optics (FA) PHYS 4541 Physics Capstone (SP) <i>FA=Fall; SP=Spring; SU=Summer</i>	CHEM 4353 Physical Chemistry I CHEM 4363 Physical Chemistry II ENGR 2213 Thermodynamics ENGR 2223 Fluid Mechanics ENGR 2533 Dynamics ENGR 2713 Digital Signals and Filtering ENGR 2723 Electrical Circuits PHYS 3031 Electrical Measurements and Electronics Lab PHYS 3024 Electrical Measurements and Electronics PHYS 4243 Solid State Physics PHYS 4481-3 Advanced Topics in Physics PHYS 4491-3 Special Problems NOTE: Students must maintain an overall 2.0 GPA for all Major Requirements.	
<b>Additional Requirements (21 hours)</b>		
CHEM 1471/1474 General Chemistry II and Lab CS 1314/L Computer Science I and 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.		
<b>Minor Requirements (18 hours)</b>		
A full list of <a href="#">minors</a> is available on the Cameron University website.		
<b>General Electives (to Complete 124 hours)</b>		
<b>Graduation Requirements</b>		
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at Cameron Minimum 60 Credit Hours at a 4-Year Institution	Minimum ½ of Major Upper Division Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0 Cameron GPA 2.0 Complete Graduation Application Online	