

BACHELOR OF SCIENCE – COMPREHENSIVE MAJOR IN PHYSICAL SCIENCES

A student must complete the core requirements, an option, and the Essential Studies requirements. Students seeking to enter graduate school are advised to take advanced coursework in the discipline, plus additional mathematics. Students should consult their advisor.

Some courses require successful completion of Prerequisite courses prior to enrollment, as articulated in the catalog course descriptions. Successful completion means earning a “C” or better in the Prerequisite course(s).

Code	Title	Credits
Essential Studies (http://catalog.csc.edu/undergraduate/essential-studies-program/)		
Core Requirements		
CHEM 131 & 131L	COLLEGE CHEMISTRY I and COLLEGE CHEMISTRY I LABORATORY	4
CHEM 132 & 132L	COLLEGE CHEMISTRY II and COLLEGE CHEMISTRY II LABORATORY	4
CHEM/GEOS 310	CAPSTONE I: RESEARCH SEMINAR	1
CHEM/GEOS 401	CAPSTONE II: SENIOR RESEARCH	1
CHEM/GEOS 410	CAPSTONE III: SENIOR RESEARCH/THESIS	1
MATH 232	APPLIED STATISTICS	3
PHYS 151 & 151L	COLLEGE PHYSICS I and COLLEGE PHYSICS I LABORATORY	4
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
Select one of the following options:		32-34
Chemistry (p. 1)		
Environmental Geoscience (p. 1)		
Geoscience (p. 1)		
Total Credits		54-56

Chemistry Option

Code	Title	Credits
Core Requirements		
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 334 & 334L	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LABORATORY	4
CHEM 335 & 335L	BIOCHEMISTRY I and BIOCHEMISTRY LABORATORY	4
CHEM 341 & 341L	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LABORATORY	4
Science or Math elective (BIOL, CHEM, GEOS, PHYS, MATH)		6
Upper division Science or Math electives (BIOL, CHEM, GEOS, PHYS, MATH)		10
Total Credits		54

Students should consult with their academic advisor in Chemistry in choosing elective courses specializing in Sciences and Mathematics.

Environmental Geoscience Option

Code	Title	Credits
Core Requirements		22
GEOS 137	ENVIRONMENTAL GEOLOGY	3
GEOS 231 & 231L	PHYSICAL GEOLOGY and PHYSICAL GEOLOGY LAB	4
GEOS 245 & 245L	FIELD SAMPLING TECHNIQUES and FIELD SAMPLING TECHNIQUES LABORATORY	4
GEOS 322	INTRODUCTION TO GIS	3
GEOS 346	GEOLOGY FIELD CAMP II	3
GEOS 431	HYDROGEOLOGY	3
GEOS 390	INTERNSHIP IN GEOSCIENCE	2
BIOL 337	ENVIRONMENTAL MANAGEMENT	3
CHEM 433 & 433L	ENVIRONMENTAL CHEMISTRY and ENVIRONMENTAL CHEMISTRY LABORATORY	4
Select one of the following courses		3-5
MATH 138	APPLIED CALCULUS	
MATH 151	CALCULUS I	
PHIL 337	ENVIRONMENTAL ETHICS	
Upper Division Geoscience Elective		
Total Credits		54-56

Geoscience Option

Code	Title	Credits
Core Requirements		
GEOS 231 & 231L	PHYSICAL GEOLOGY and PHYSICAL GEOLOGY LAB	4
GEOS 234 & 234L	EARTH SYSTEM HISTORY and EARTH SYSTEM HISTORY LAB	4
GEOS 245 & 245L	FIELD SAMPLING TECHNIQUES and FIELD SAMPLING TECHNIQUES LABORATORY	4
GEOS 322	INTRODUCTION TO GIS	3
GEOS 338	ROCKS AND MINERALS	3
GEOS 346	GEOLOGY FIELD CAMP II	3
GEOS 390	INTERNSHIP IN GEOSCIENCE	2
GEOS 431	HYDROGEOLOGY	3
GEOS 432	STRUCTURAL GEOLOGY	3
GEOS 439 & 439L	SEDIMENTOLOGY & STRATIGRAPHY and SEDIMENTOLOGY & STRATIGRAPHY L	4
Total Credits		55