

BACHELOR OF SCIENCE - EDUCATION - SUBJECT ENDORSEMENT IN EARTH AND SPACE SCIENCE (GRADES 7-12)

¹ CHEM 131/131L and CHEM 132/132L may be substituted for CHEM 140/140L. See Geoscience advisor.

To obtain a departmental recommendation, the student must complete a minimum of 9 hours from Chadron State College in BIOL, CHEM, GEOS, or PHYS.

Students must complete the following program in addition to the Professional Education and Essential Studies requirements. It is strongly recommended that students pursuing this endorsement complete

- MATH 138 APPLIED CALCULUS as the Essential Studies SLO #4 requirement and
- GEOS 437 WORLD ENVIRONMENTAL ISSUES to fulfill the Essential Studies SLO #9 requirement.

A final grade of "C" or better must be attained in all endorsement area courses. To obtain a departmental recommendation, the student must complete a minimum of 9 credit hours from Chadron State College in BIOL, CHEM, GEOS, or PHYS.

Code	Title	Credits
Essential Studies (http://catalog.csc.edu/undergraduate/essential-studies-program)		
Professional Education Requirements (http://catalog.csc.edu/secondary-education-requirements)		
Core Requirements		
BIOL 136 & 136L	BIOLOGICAL SCIENCE and BIOLOGICAL SCIENCE LABORATORY	3
CHEM 140 & 140L	SURVEY OF CHEMISTRY and SURVEY OF CHEMISTRY LABORATORY ¹	4
GEOS 137	ENVIRONMENTAL GEOLOGY	3
GEOS 231 & 231L	PHYSICAL GEOLOGY and PHYSICAL GEOLOGY LABORATORY	4
GEOS 233 & 233L	ASTRONOMY and ASTRONOMY LABORATORY	3
GEOS 234 & 234L	EARTH SYSTEM HISTORY and EARTH SYSTEM HISTORY LABORATORY	4
GEOS 310	CAPSTONE I: RESEARCH SEMINAR	1
GEOS 320	SUPERVISED STUDY IN LAB AND FIELD METHODS	1
GEOS 334	METEOROLOGY	3
GEOS 401	CAPSTONE II: SENIOR RESEARCH	1
GEOS 410	CAPSTONE III: SENIOR RESEARCH THESIS	1
GEOS 431	GEOLOGY OF WATER RESOURCES	3
GEOS 434	INTRODUCTION TO OCEANOGRAPHY	3
Select one of the following:		4-5
PHYS 151 & 151L	COLLEGE PHYSICS I and COLLEGE PHYSICS I LABORATORY	
PHYS 241 & 241L	UNIVERSITY PHYSICS I and UNIVERSITY PHYSICS I LABORATORY	
Biology Electives		1
Upper division Geoscience Electives		3
Total Credits		42-43