

Earth Science Education

Department Information

- **Department Location:**
Katherine Kilbourne Burgum Family Life, 4-H Center
- **Department Phone:**
701-231-7921
- **Department Web Site:**
www.ndsu.edu/education/
- **Credential Offered:**
B.S.; B.A.
- **Official Program Curriculum:**
bulletin.ndsu.edu/undergraduate/program-curriculum/earth-science-education/

Earth Science involves the study of earth and space systems, including areas such as astronomy, geology, meteorology and oceanography.

The Program

Candidates in the Earth Science Education major are prepared to teach a diverse curriculum to a diverse student population. The Earth Science Education student should work closely with an advisor to be sure that the general education courses taken will provide a strong foundation for the advanced courses in the major.

Professional Education Courses

Students have to enroll in the 300-level professional education courses before applying to be formally admitted to the School of Education (SOE). Prior to enrolling in the 400-level courses, students must complete the application for admission to the SOE; attain a minimum of a 2.75 grade point average overall in their course work and education courses; and pass the Praxis Core Academic Skills for Educators exam(s). Requirements for admission can be found on the School of Education website (<https://www.ndsu.edu/education>).

Student Teaching

Student teaching is the culmination of the teacher preparation program. Students have the opportunity to apply knowledge and skills acquired in college courses under the supervision of an experienced science educator.

Student Advisement

Students will be assigned individual advisors who will work with them closely in program planning and in other ways to advise and assist them. Students are encouraged to seek their advisor's help whenever needed.

Certification

Upon completing this program, graduates are eligible for teacher licensure from the North Dakota Education Standards and Practices Board (ESPB). The program is accredited by the Council for the Accreditation of Educator Preparation (CAEP).

Career Opportunities

In many states, including North Dakota, Earth Science is typically taught in middle school. This can limit the number of opportunities for candidates.

Candidates are encouraged to consider taking the General Science licensure exam to become eligible to teach multiple science disciplines in middle and high school levels. Students may also choose to add a Geology/Geosciences major to increase options after graduation.

Plan of Study

Please note this is a sample plan of study and not an official curriculum. Actual student schedules for each semester will vary depending on start year, education goals, applicable transfer credit, and course availability. Students are encouraged to work with their academic advisor on a regular basis to review degree progress and customize an individual plan of study.

First Year		
Fall	Credits Spring	Credits
CHEM 121 or 150 (Must be matching lecture and lab)	3 CHEM 122 or 151 (Must be matching lecture and lab)	3
CHEM 121L or 160 (Must be matching lecture and lab)	1 CHEM 122L or 161 (Must be matching lecture and lab)	1

GEOL 105 & 105L	4	COMM 110	3
ENGL 110 (or 120 College Composition II based on placement)	4	ENGL 120	3
MATH 105 or 165	3-4	GEOL 106	3
		GEOL 106L	1
15-16			14
Second Year			
Fall	Credits	Spring	Credits
BIOL 124 & BIOL 100L	4	BIOL 151 & 151L	4
BIOL 150 & 150L	4	EDUC 322	3
EDUC 321	3	GEOL 412	3
PHYS 110	3	PHYS 120 & 120L	4
Wellness Gen Ed	2	SOIL 217	3
Pass Praxis Core Academic Skills Exam		Apply to the School of Education	
16			17
Third Year			
Fall	Credits	Spring	Credits
EDUC 451	3	EDUC 481	3
EDUC 489	3	GEOL 350 & GEOL 303 (Co-Requisites)	4
GEOL 420 & GEOL 421 (co-requisites; prereq: CHEM 121 or 150)	4	GEOL 422 & GEOL 423 (Co-Requisites; Prereq: GEOL 420)	4
STAT 330	3	Humanities & Fine Arts Gen Ed*	3
Social & Behavioral Science Gen Ed*	3		
16			14
Fourth Year			
Fall	Credits	Spring	Credits
EDUC 482	3	EDUC 485	1
EDUC 486	3	EDUC 487	9
ENGL 324	3	EDUC 488	3
Humanities & Fine Arts Gen Ed*	3		
Social & Behavioral Science Gen Ed*	3		
Apply for Student Teaching			
Complete PLT (grades 7-12) Exam			
Complete Subject Area Assessment Exam			
15			13
Total Credits: 120-121			

* One of these General Education courses needs to be selected from Category D - Cultural Diversity.