

Composite Science Education

The Bachelor of Science Education in Composite Science Education at Minot State University will prepare you to teach Biology, Chemistry, Earth Science, and Physics/Astronomy, and then you will choose to focus on one of these science disciplines (Biology, Chemistry, or Geology) by taking degree-specific electives. With a composite science education degree, you are more likely to find a job in almost any school district in North Dakota, both Class A and B schools and school districts across the United States and Canada. The demand for science, technology, engineering, and mathematics (STEM) teachers is so great that many communities are demanding science teachers that can teach multiple science disciplines on the secondary level. After graduating, you will be licensed to teach science from grades 5-12.

University Teacher Education Policies

Refer to the Teacher Education Policies and Procedure (<http://catalog.minotstateu.edu/undergraduate/teachereducationpoliciesandprocedures/>) pages of the catalog for details regarding Teacher Education at Minot State University. These pages will explain admission, retention, and exit requirements of the program for Composite Science majors in Teacher Education.

Any students who wish to major or minor in Biology as they obtain their **BSEd Composite Science** degree should speak to their advisor.

Bachelor of Science in Education with a Major in Composite Science Education

Composite Science Education Majors must take all core courses and major in either biology, chemistry, or earth science

General Education

Composite Science Education majors are required to take the following courses which may be used to help satisfy General Education requirements:

MATH 103 or MATH 107	College Algebra Precalculus	4
MATH 105 or MATH 165	College Trigonometry Calculus I	4
PHYS 211 or PHYS 251	College Physics I University Physics I	4
PHYS 110	Astronomy	4
GEOG 330 or SCI 110	Geography of Weather and Climate Introduction to Meteorology	3
MATH 210 or BIOL 240 or DATA 211	Elementary Statistics Biometry Applied Statistics and Data Visualization	4

Required Core Science Courses

BIOL 150	General Biology I	4
BIOL 151	General Biology II	4
BIOL 215	Genetics	4
BIOL 301	Evolution	3
CHEM 121	General Chemistry I (& Chem 121L)	5
CHEM 122	General Chemistry II (& Chem 122L)	5
CHEM 330	Quantitative Analysis	4
GEOL 105	Physical Geology with Lab	4
GEOL 106	Historical Geology with Lab	4
GEOL 307		4

Biology Focus

3 Additional 200+ Biology Electives, not including BIOL 240 9-12

Chemistry Focus

CHEM 240 or CHEM 341	Fundamentals of Organic Chemistry Organic Chemistry I	5
4+ credits of Chemistry Electives CHEM 342 or above		4-5

Earth Science Focus

GEOL 322	Geomorphology	4
GEOL 361	Structural Geology	4

GEOL 471	Sedimentation and Stratigraphy	4
Research Track Courses		
Biology		
SCI 494	Directed Research in Science	1-6
Chemistry/Geology		
SCI 240	Research Methods	2
SCI 480	Seminar	2
Or		
Non-Research Track		
Two additional 300+ courses within major		6-8
Professional Education Sequence (admission to teacher education not required)		
ED 260	Educational Psychology	3
ED 260L	Clinical I	0
ED 282	Managing the Learning Environment	2
ED 282L	Clinical II	0.5
ED 284	Teaching Diverse Learners	2
ED 284L	Clinical III	0.5
ED 287	Early-Level Transition Point Conference	0
ED 320	Curriculum, Planning, and Assessment I	2
ED 321L	Clinical IV	0.5
ED 323L	Clinical V	0.5
ED 324L	Fall Experience	0
ED 380	Technology in Teaching	2
ED 407	Mid-Level Transition Point Conference	0
SPED 110	Introduction to Exceptional Children	3
HIST 283	Diversity in America	3
Select one of the following:		3
Professional Education Sequence (admission to teacher education required)		
ED 322	Data Driven Integrated Instruction ¹	2
ED 483	Student Teaching Seminar: Secondary ¹	2
or ED 482	Student Teaching Seminar	
or ED 484	Student Teaching Seminar: K12	
Department Specific Courses (admission to teacher education required)		
SCI 391	Teaching Science in Secondary Schools ¹	3
ED 493	Student Teaching, Secondary ¹	10
Total Hours		144-155

¹ Requires admittance to Teacher Education. Refer to Teacher Education Policies and Procedures (<http://catalog.minotstateu.edu/undergraduate/teachereducationpoliciesandprocedures/>).