Geology

Department Information

Department Location:
 238 Sugihara Hall

· Department Phone:

701-231-8837

· Department Web Site:

www.ndsu.edu/geosci/ (http://www.ndsu.edu/geosci/)

· Credential Offered:

B.S.; B.A.

· Sample Program Guide:

catalog.ndsu.edu/programs-study/undergraduate/geology/#planofstudytext (http://catalog.ndsu.edu/programs-study/undergraduate/geology/#planofstudytext)

Major Requirements

Major: Geology

Degree Type: B.A. or B.S.

Minimum Degree Credits to Graduate: 122

University Degree Requirements

- 1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
- 2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
- 3. Satisfactory completion of the general education requirements as specified by the university.
- 4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
- 5. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
- 6. Transfer Students: Must earn a minimum of 60 credits from a baccalaureate-degree granting or professional institution.
 - a. Of these 60, at least 36 must be NDSU resident credits as defined in #7.
 - b. Within the 36 resident credits, a minimum of 15 must be in courses numbered 300 or higher and 15 credits in the major field of study.
- 7. At least 36 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.

For complete information, please refer to the Degree and Graduation Requirements (http://catalog.ndsu.edu/past-bulletin-archive/2022-23/academic-policies/undergraduate-policies/degree-and-graduation/) section of this Bulletin.

University General Education Requirements

Code	Title	Credits
Communication (C)		12
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing [†]		
Quantitative Reasoning (R) [†]		3
Science and Technology (S) [†]		10
Humanities and Fine Arts (A) †		6
Social and Behavioral Sciences (B)		6
Wellness (W) †		2
Cultural Diversity (D) *†		
Global Perspectives (G) *†		
Total Credits		39

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- * May be satisfied by completing courses in another General Education category.
- General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.
- A list of university approved general education courses and administrative policies are available here (http://catalog.ndsu.edu/past-bulletin-archive/2022-23/academic-policies/undergraduate-policies/general-education/#genedcoursestext).

College Requirements

Code	Title	Credits
Bachelor of Arts (BA) Degree – An additional 12 credits Humanities and Social Sciences and proficiency at the second year level in a modern foreign language. *		12
Bachelor of Science (BS) Degree -	An additional 6 credits in Humanities or Social Sciences *	6

Humanities and Social Sciences may be fulfilled by any course having the following prefix: ADHM, ANTH, ARCH, ART, CJ, CLAS, COMM, ECON, ENGL, FREN, GEOG, GERM, HDFS, HIST, LA, LANG, MUSC, PHIL, POLS, PSYC, RELS, SOC, SPAN, THEA, WGS, or any course from the approved list of general education courses in humanities and social sciences (general education categories A and B). These credits must come from outside the department of the student's major.

Major Requirements

Geology Core Requirements. Students must have at least a 2.0 cumulative GPA in the geology core requirements. 4 GEOG 455 Introduction to Geographic Information Systems 4 GEOL 105 Physical Geology 4 & 105L and Physical Geology Lab (May satisfy general education category S) 4 EGOL 106 The Earth Through Time 4 & 106L and The Earth Through Time Lab 2 GEOL 150 Concepts, Skills, and Ethics in Geoscience 2 EGOL 303 Invertebrate Paleontology 4 & GEOL 303 and Paleontology Field Course 4 EGOL 410 Sedimentology/Stratigraphy 4 GEOL 421 Geomorphology 4 & GEOL 422 Mineralogy 4 & GEOL 423 Petrography 1 GEOL 424 Petrography 1 GEOL 450 Field Geology 3 GEOL 450 Structural Geology 4 GEOL 491 Seminar (Junior Year) 1 GEOL 491 Seminar (Senior Year) 1	Code	Title	Credits	
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SOIL 444 Soil Genesis and Survey 2 Select one course from the following: 2 GEOL 301 Lake Superior Field Course GEOL 302 Black Hills Field Course GEOL 496 Field Experience Related Required Courses ENGL 324 Writing in the Sciences 3 MATH 165 Calculus I (May satisfy general education category S) 4 MATH 166 Calculus II 4 Select one of the following chemistry sequences: 8 Sequence A: CHEM 121 General Chemistry I	GEOL 491	Seminar (Junior Year)	1	
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MATH 166 Calculus II 4 Select one of the following chemistry sequences: 8 Sequence A: CHEM 121 General Chemistry I	ENGL 324	Writing in the Sciences	3	
Select one of the following chemistry sequences: Sequence A: CHEM 121 General Chemistry I	MATH 165	Calculus I (May satisfy general education category S)	4	
Sequence A: CHEM 121 General Chemistry I	MATH 166	Calculus II	4	
CHEM 121 General Chemistry I	Select one of the following chemistry sequences:			
	Sequence A:			
& 121L and General Chemistry I Laboratory				
	& 121L	and General Chemistry I Laboratory		

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Total Credits		74-76
& 252L	and University Physics II Laboratory	
PHYS 252	University Physics II	
& 251L	and University Physics I Laboratory	
PHYS 251	University Physics I	
Sequence B:		
& 212L	and College Physics II Laboratory	
PHYS 212	College Physics II	
& 211L	and College Physics I Laboratory	
PHYS 211	College Physics I	
Sequence A:		
Select one of the following	g physics sequences:	8-10
CHEM 151 & CHEM 161	Principles of Chemistry II and Principles of Chemistry Laboratory II	
CHEM 150 & CHEM 160	Principles of Chemistry I and Principles of Chemistry Laboratory I	
Sequence B:		
& 122L	and General Chemistry II Laboratory	
CHEM 122	General Chemistry II	

Program notes

- Except for courses offered only as pass/fail grading, no course may be taken Pass/Fail.
- Majors planning on graduate studies should be aware that a summer field camp course may be required for graduate admission. This course is recommended to be taken during the summer following the junior or senior year. Information on field camp courses and a small departmental scholarship to support these studies may be obtained from an adviser.