COLLEGE OF SCIENCE & MATHEMATICS
MAJOR: GEOLOGY
ACADEMIC YEAR: 2013-2014
DEGREE TYPE: B.A. or B.S.
REQUIRED DEGREE CREDITS TO GRADUATE: 122

GENERAL EDUCATION REQUIREMENTS – 40 CREDITS

Lower Division Requirements – 37 Credits
First Year Experience (F) - 1 Credit
UNIV 189 Skills for Academic Success 1 cr
Students transferring in 24 or more credits do not need to take UNIV 189.

Communication (C) - 9 Credits
ENGL 110 College Composition I 3 cr
ENGL 120 College Composition II 3 cr
COMM 110 Fund of Public Speaking 3 cr

Quantitative Reasoning (R) - 3 Credits
MATH 146 or Applied Calculus I 4 cr
165 Calculus I
The 3 credits required in the Quantitative Reasoning category will be fulfilled with requirements of the major.

Science & Technology (S) - 10 Credits
The 10 credits required in the Science and Technology category will be fulfilled with requirements of the major.

Humanities & Fine Arts (A) - 6 Credits
Select from current general education courses www.ndsu.edu/registrar/gened/

Social & Behavioral Sciences (B) - 6 Credits
Select from current general education courses www.ndsu.edu/registrar/gened/

Wellness (W) - 2 Credits
Select from current general education courses www.ndsu.edu/registrar/gened/

Cultural Diversity (D)
Select from current general education courses www.ndsu.edu/registrar/gened/

Global Perspectives (G)
GEOL 105 Physical Geology

Upper Division Requirements - Writing – 3 Credits
ENGL 324 Writing in the Sciences 3 cr

DEPARTMENT AND COLLEGE REQUIREMENTS:
• Except for courses offered only as pass/fail grading, no course may be taken Pass/Fail.

Bachelor of Science (BS) Degree – An additional 6 credits in Humanities or Social Sciences*

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.

GEOLOGY CORE REQUIREMENTS – 45 CREDITS
Students must have at least a 2.0 cumulative GPA in the geology core requirements.

GEOG 455 Intro to Geographic Info Systems 4 cr
GEOL 103/L Physical Geology & Lab 3/1 cr
GEOL 106/L Earth Through Time & Lab 3/1 cr
GEOL 301 or Lake Superior Field Course 2 cr
302 or Black Hills Field Course
496 Field Experience
GEOL 410 Sedimentology/Stratigraphy 4 cr
GEOL 412 Geomorphology 3 cr
GEOL 420/421 Mineralogy & Lab 3/1 cr
GEOL 422 Petrology 3 cr
GEOL 423 Petrography 1 cr
GEOL 440 Quaternary Biology 4 cr
GEOL 450 Field Geology 3 cr
GEOL 457 Structural Geology 4 cr
GEOL 491 Seminar - Junior Year 1 cr
GEOL 491 Capstone - Senior Year 1 cr
SOIL 444 Soil Genesis & Survey 3 cr

RELATED REQUIRED COURSES – 27-30 CREDITS
Not counted as part of major credits

Chemistry (Choose 1 sequence) - 8 Credits
CHEM 121/L General Chemistry I & Lab 3/1 cr
CHEM 122/L General Chemistry II & Lab
OR
CHEM 150/160 Principles of Chemistry I & Lab 3/1 cr
CHEM 151/161 Principles of Chemistry II & Lab 3/1 cr

Mathematics (Choose 1 sequence) - 8 Credits
MATH 146 Applied Calculus I 4 cr
MATH 147 Applied Calculus II 4 cr
OR
MATH 165 Calculus I 4 cr
MATH 166 Calculus II 4 cr

Physics (Choose 1 sequence) – 8-10 Credits
PHYS 211/L College Physics I & Lab 3/1 cr
PHYS 212/L College Physics II & Lab
OR
PHYS 251/L University Physics I & Lab 4/1 cr
PHYS 252/L University Physics II & Lab 4/1 cr

Skills (Choose 1) – 3-4 Credits
CSCI 122 Visual BASIC 3 cr
CSCI 160 Computer Science I 4 cr
CSCI 227 Computing Fundamentals I 3 cr

DEGREE REQUIREMENTS – UP TO 17 CREDITS TO REACH 122

*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.