

College of Science, Technology, Engineering, and Mathematics

Geology BS

(108 credits)

Why study Geology?

Geology is the science of planet Earth. Geologists use elements of chemistry, physics, biology and mathematics in interpreting the evolution of the earth and its life forms. Applied geology addresses exploration of earth resources, environmental quality and hazards and practical understanding of the planet on which we live. Geologists at EWU use elements of chemistry, physics, biology and mathematics to interpret the history of the Earth and its life forms. Courses address Earth resources, evaluation of natural hazards and environmental quality. Faculty and students use advanced chemical and physical analytical techniques and computers to understand and model natural systems.

Other Degree Options

BA in Geology; BAE in Earth and Space Science , Secondary Education; Minor in Geology

Career Opportunities

Geotechnical and environmental fields, petroleum industry, mineral exploration and mining, hydrogeology



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This is an example of a four year class schedule. Academic Advisors are there to help create individualized plans.

First Year

Fall 1

CHEM 171 (4 cr.)
CHEM 171L (1 cr.)
ENGL 101 (5 cr.)
MATH 161 (5 cr.)

Q2

BACR (5 cr.)
GEOL 297 Workshop, Semina
One course (BIOL, PHYS or C
ENGL 201 (5 cr.)

Q3

Math 162 or Math 380 or BI
One course (BIOL, PHYS or C
GEOL 120 (5 cr.)

Second Year

Q5

BACR (5 cr.)
General Elective (5 cr.)
PHYS 131 or PHYS 151 (4 cr.)
PHYS 161 (1 cr.)

Q6

BACR (5 cr.)
General Elective (5 cr.)
GEOL 121 (5 cr.)

Q7

General Elective (5 cr.)
General Elective (5 cr.)
GEOL 122 (5 cr.)

Third Year

Q9

BACR (5 cr.)
Diversity (5 cr.)
Upper Div Major Elective (se
GEOL 311 (4 cr.)

Q10

General Elective (5 cr.)
GEOL 320 or 360 (4 cr.)
GEOG 323 (3 cr.)
GEOL 312 (4 cr.)

Q11

General Elective (1 cr.)
Global (5 cr.)
Upper Div Major Elective (se
GEOL 313 (4 cr.)

Fourth Year

Q13

Choose one fundamental co
Upper Div General elective (
GEOL 411 (4 cr.)

Q14

Choose one fundamental co
General Elective (5 cr.)
GEOL 430 (4 cr.)

Q15

Choose one fundamental co
GEOL 490 or 490A or 490B (4
GEOL upper-level elective (s
GEOL 431 (4 cr.)

Listed is a Sample Four Year Plan. Individual plans will vary based on placement test scores and course availability.



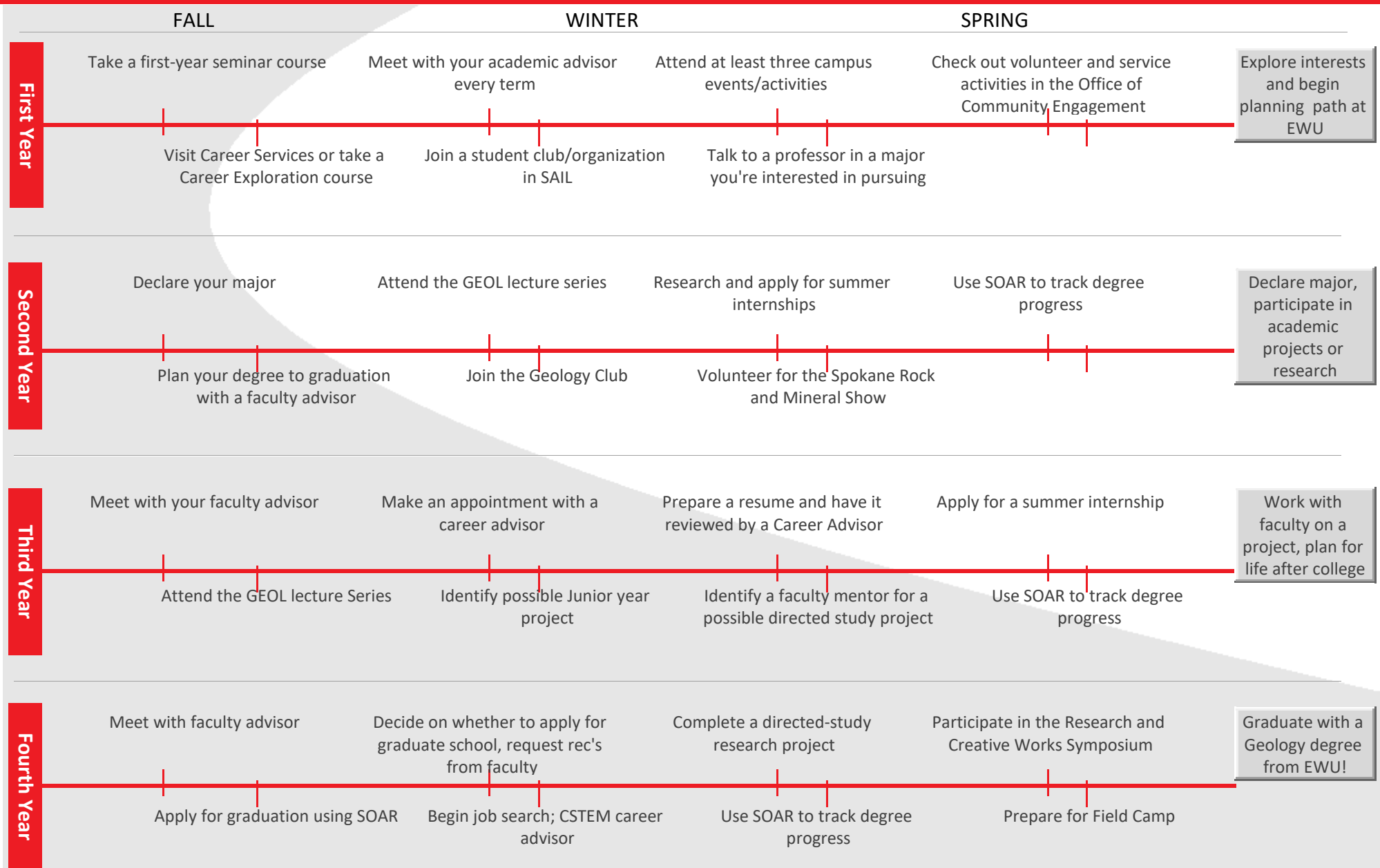
Flight Plan to Success

The following milestones will help you succeed and improve your experience at EWU.

Geology, BS

College of Science, Technology, Engineering, and Mathematics

Geology



All recommended activities can occur at any time during a student's time at EWU



Student's name: _____ EWU ID: _____

College of Science, Technology, Engineering, and Mathematics
 SOAR Department: Geology | SOAR Major: GEOL BS
 Major Declaration Form: Geology, BS-GEOL
 Math proficiency needed: MATH 161 or 380

Bachelor of Science in Geology
 2019-2020 Catalog Year

First year courses and prerequisites	Notes	Previously offered **
Q1 CHEM 171 GENERAL CHEMISTRY I (4 cr.) Prerequisites: ?C in MATH 141 or concurrent enrollment; ?C in CHEM 100 or ?C in CHEM 161 or one year of high school chemistry.		
Q1 CHEM 171L GENERAL CHEM LABORATORY I (1 cr.) Prerequisite: CHEM 171 or taken concurrently.		
Q1 ENGL 101 COLL COMP: EXPOSITN & ARGUMNT (5 cr.) Prerequisite: Writing Placement Test or General Advising.□		F18, W19, S19
Q1 MATH 161 CALCULUS I (5 cr.) Prerequisite: MATH 142.	Note: for the university proficiencies, this course may be substituted for MATH 107.□□	F18, W19, S19
Q2 BACR (5 cr.)		
Q2 GEOL 297 Workshop, Seminar, Conference, etc. (1 cr.)	1-5 credits	
Q2 One course (BIOL, PHYS or CHEM)(see catalog) (5 cr.)		
Q2 ENGL 201 COLL COMP: ANALYSIS/RES/DOCMNT (5 cr.) Prerequisite: ENGL 101, Writing Placement Test or general advising.		F18, W19, S19
Q3 Math 162 or Math 380 or BIOL 380 or DSCI 245 (4 cr.)	4-5 credits, some upper, some lower div	
Q3 One course (BIOL, PHYS or CHEM)(see catalog) (5 cr.)		
Q3 GEOL 120 PHYS GEOL - THE SOLID EARTH (5 cr.) Prerequisite: MTHD 104 or equivalent.	Note: required weekly laboratories and one field trip may be required.□□	F18, W19

I have discussed this academic plan with the student listed above. Advisor name: _____ Advisor signature: _____

* See the catalog for prerequisites and other details.

** Future course offerings may differ from the past. Check the course schedule for future courses.

To follow this MAP, you should place into MATH 161 or 380. If you place lower, your custom MAP may change.

This list of courses is for information purposes only. All students are required to follow the catalog requirements for the year they declared a major.

Second year courses and prerequisites

Notes

Previously offered **

Q5	BACR (5 cr.)	
Q5	General Elective (5 cr.)	
Q5	PHYS 131 or PHYS 151 (4 cr.)	
Q5	PHYS 161 MECHANICS LABORATORY (1 cr.) Prerequisite: MATH 142.	F18, W19
Q6	BACR (5 cr.)	
Q6	General Elective (5 cr.)	
Q6	GEOL 121 PHYS GEOL - SURFICIAL PROCESS (5 cr.) Note: weekly laboratories are required and one field trip may be required.	W19, S19
Q7	General Elective (5 cr.)	
Q7	General Elective (5 cr.)	
Q7	GEOL 122 HISTORICAL GEOLOGY (5 cr.) Prerequisite: GEOL 121.	S19
Q9	BACR (5 cr.)	

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Third year courses and prerequisites

Notes

Previously offered **

Q9	Diversity (5 cr.)		
Q9	Upper Div Major Elective (see catalog) (4 cr.)		
Q9	GEOL 311 EARTH MATERIALS (4 cr.) Prerequisites: GEOL 120 and CHEM 171 and CHEM 171L.		F18
Q10	General Elective (5 cr.)		
Q10	GEOL 320 or 360 (4 cr.)		
Q10	GEOG 323 GIS FOR ENVIRONMENTAL SCIENCES (3 cr.) Prerequisite: includes hands-on GIS work in the lab.	Note: includes hands-on GIS work in the lab.	W19
Q10	GEOL 312 CRYST AND OPT MIN (4 cr.) Prerequisite: GEOL 311.		W19
Q11	General Elective (1 cr.)		
Q11	Global (5 cr.)		
Q11	Upper Div Major Elective (see catalog) (4 cr.)		
Q11	GEOL 313 IGNEOUS & METAMORPHIC PETROL (4 cr.) Prerequisites: GEOL 311 and GEOL 312.		S19

I have discussed this academic plan with the student listed above. Advisor name: _____ Advisor signature: _____

* See the catalog for prerequisites and other details.

** Future course offerings may differ from the past. Check the course schedule for future courses.

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Fourth year courses and prerequisites

Notes

Previously offered **

Q13	Choose one fundamental course (see catalog) (4 cr.)	
Q13	Upper Div General elective (5 cr.)	
Q13	GEOL 411 SEDIMENTOLOGY AND STRATIGRAPHY (4 cr.) Prerequisite: GEOL 122 and GEOL 311. □	F18
Q14	Choose one fundamental course (see catalog) (4 cr.)	
Q14	General Elective (5 cr.)	
Q14	GEOL 430 STRUCTURAL GEOLOGY I (4 cr.) Prerequisite: GEOL 411.	W19
Q15	Choose one fundamental course (see catalog) (4 cr.)	
Q15	GEOL 490 or 490A or 490B (4 cr.)	4-10 credits
Q15	GEOL upper-level elective (see catalog) (4 cr.)	
Q15	GEOL 431 STRUCTURAL GEOLOGY II (4 cr.) Prerequisite: GEOL 430.□	S19

I have discussed this academic plan with the student listed above. Advisor name: _____ Advisor signature: _____

* See the catalog for prerequisites and other details.

** Future course offerings may differ from the past. Check the course schedule for future courses.

To follow this MAP, you should place into MATH 161 or 380. If you place lower, your custom MAP may change.

This list of courses is for information purposes only. All students are required to follow the catalog requirements for the year they declared a major.