

College of Science - Earth Science, BS with Concentration in Earth Surface Processes

Catalog Year: 2019 - 2020

		Grades		
Mason Core Requirements: 30 credits	Course Information	Credits	Earned	Needed
Written Communication:	ENGH 101 (100)	3		
Oral Communication:		3		
*Quantitative Reasoning	*Satisfied by Major Requirements			
Information Technology		3		
Arts		3		
Global Understanding		3		
Literature		3		
*Natural Science	*Satisfied by Major Requirements			
Social & Behavioral Sciences		3		
Western Civilization/World History		3		
Written Communication:	ENGH 302	3		
Synthesis/Capstone		3		

Major Requirements (71 -76 credits)

Students must complete all coursework with a minimum GPA of 2.00.

GEOL 101	Introductory Geology I	4		
GEOL 309 or BIOL 309	Introduction to Oceanography	3		
GEOL 420	Earth Science and Policy	3		
CHEM 211	General Chemistry I	3		
& CHEM 213	and General Chemistry Laboratory I	1		
CHEM 212	General Chemistry II	3		
& CHEM 214	and General Chemistry Laboratory II	1		
MATH 113	Analytic Geometry and Calculus I	4		
MATH 114	Analytic Geometry and Calculus II	4		
STAT 250	Introductory Statistics I	3		

Select one of the following options (3-4 credits):

Option A or B: CLIM 111/112	Intro to the Fundamentals of Atmos Sci with Lab			
Option B: PHYS 111/112	Intro to the Fundamentals of Atmos Sci with Lab			
Option C: GGS 309	Meteorology and Climate			

One from the following Mason Core Natural Science sequences:

PHYS 160/161 and 260/261	University Physics I & II with labs	8		
PHYS 243/244 & PHYS 245/246	College Physics I & II with labs			

Concentration in Earth Surface Processes (31-35 credits)

GEOL 102	Introductory Geology II (Mason Core)	4		
or EVPP 110	The Ecosphere: An Intro to Environmental Science I			
GEOL 302	Mineralogy	4		
GEOL 303	Field Mapping Techniques	3		
GEOL 306	Soil Science	3		
GEOL 317	Geomorphology 1	4		
GGS 311	Introduction to Geographic Information Systems	3		

Concentration Electives (10-15 credits) from: GEOL 304, 305, 313, 315, 363, 401, 403, 417

Concentration Elective #1:				
Concentration Elective #2:				
Concentration Elective #3:				
Concentration Elective #4:				
Concentration Elective #5:				

Degree Notes

Approx. 13-19 remaining credits may be completed with elective courses to bring the degree total to 120 with 45 of these credits at the 300/400 level.

Advisor Notes:

CONCENTRATION IN EARTH SURFACE PROCESSES

B.S. Earth Science

2019 - 2020

FALL YEAR 1	CREDITS	SPRING YEAR 1	CREDITS	NOTES
GEOL 101	4	GEOL 102	4	*S.B.S = Social and Behavioral Science
MATH 113	4	CHEM 211	3	
COMM 100 or 101	3	CHEM 213	1	
Core (S.B.S)	3	MATH 114	4	
UNIV 100	1	ENGH 101	3	
Total:	15 credits	Total:	15 credits	

FALL YEAR 2	CREDITS	SPRING YEAR 2	CREDITS	NOTES
CLIM 111	3	GGG 311	3	*G.U. = Global Understanding
CLIM 112	1	GEOL 313	3	
CHEM 212	3	STAT 250	3	
CHEM 214	1	Core (Lit.)	3	
GEOL 302	4	Core (G.U.)	3	
GEOL 303	3			
Total:	15 credits	Total:	15 credits	

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
GEOL 304	4	GEOL 363	4	*W.C. = Western Civ.
GEOL 309	4	PHYS 245	3	
PHYS 243	3	PHYS 246	1	
PHYS 244	1	Core (W.C.)	3	
General Elective	3	Core (IT)	3	
		General Elective	2	
Total:	15 credits	Total:	16 credits	

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
GEOL 317	4	GEOL 420	3	
GEOL Elective	3 or 4	GEOL 306	3	
ENGH 302	3	Core (Arts)	3	
General Elective	3	General Elective	3	
General Elective	3			
Total:	16 or 17 credits	Total:	12 credits	

*Students must earn 120 credits for graduation; 45 credits must be upper-level (courses 300+).

*GEOL 308 is recommended, but not required.

*Ten to Fifteen credits are required from the following coursework: **GEOL 304 (4)**, GEOL 305 (3), **GEOL 313 (3)**, GEOL 315 (1-3), **GEOL 363 (4)**, GEOL 401 (4), GEOL 403 (3), GEOL 417 (3).