

College of Science - Earth Science, BS with Concentration in Environmental Geoscience

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 (75 - 82 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		
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 Environmental Geoscience (35-41 credits)

GEOL 102	Introductory Geology II (Mason Core)	4		
GEOL 302	Mineralogy	4		
GEOL 305	Environmental Geology 1	3		
GEOL 306	Soil Science	3		
GEOL 313	Hydrogeology	3		
GEOL 320	Geology of Earth Resources	3		
GEOL 321	Geology of Energy Resources	3		
GEOL 403	Geochemistry	3		
or CHEM 427	Aquatic Environmental Chemistry			
EVPP 336	Human Dimensions of the Environment	3		
or EVPP 361	Introduction to Environmental Policy			

Concentration Electives (6-12 credits) from the following: CLIM 101, 412; GEOL 304; EVPP 201, 336, 361, 432, 436; GGS 302, 311; PHYS 331; CONF 101; INTS 211; PRLS 300, 402

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

Degree Notes

Approx. 5 - 8 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 ENVIRONMENTAL GEOSCIENCE

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
GEOL 302	4	GEOL 305	3	*W.C. = Western Civ.
CHEM 212	3	GEOL 306	3	
CHEM 214	1	STAT 250	3	
Core (W.C.)	3	Core (Lit.)	3	
General Elective	3	Core (Arts)	3	
Total:	15 credits	Total:	15 credits	

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
GEOL 321	3	GEOL 313	3	*G.U. = Global Understanding
GEOL 309	4	GEOL 320	3	
CLIM 111	3	PHYS 243	3	
CLIM 112	1	PHYS 244	1	
Core (G.U.)	3	Core (IT)	3	
General Elective	1	ENGH 302	3	
Total:	15 credits	Total:	16 credits	

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
CLIM 412	3	GEOL 420 (Synth.)	3	
GEOL 304	4	GEOL 403	3	
GGG 311	3	EVPP 336	3	
PHYS 245	3	General Elective	3	
PHYS 246	1	General Elective	3	
Total:	14 credits	Total:	15 credits	

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

*Six to Twelve credits are required from the following coursework: CLIM 101 (3), CLIM 412 (3), CONF 101 (3), EVPP 201 (3), EVPP 336 (3), EVPP 361 (3), EVPP 432 (3), EVPP 436 (3), GEOL 304 (4), GGS 302 (3), GGS 311 (3), GGS 322 (3), INTS 211 (3-6), PHYS 331 (3), PRLS 300 (3), PRLS 402 (3).