

# B.S. Geological Science – Environmental Hydrogeology Opt Sample Curriculum 2020-2021

First Year – Fall Semester			First Year – Spring Semester		
GEOL 111, 101L	Physical Geology for Science Majors with lab	4	GEOL 102, 102L	Historical Geology with lab	4
MATH 143	Pre-Calculus Algebra and Analytic Geometry <i>MATH 108 with 'C' or better or sufficient test scores</i>	3	CHEM 111, 111L	Principles of Chemistry I <i>Sufficient math scores or min 'C' in CHEM 101, MATH 143, 160, or 170</i>	4
MATH 144	Analytic Trigonometry <i>Sufficient test scores</i>	1	MATH 170	Analytic Geometry and Calculus I <i>MATH 143 with 'C' or better and 144, or sufficient exam scores</i>	4
ENGL 101	Introduction to College Writing <i>Sufficient test scores</i>	3	ENGL 102	College Writing and Rhetoric <i>ENGL 101 or sufficient test scores</i>	3
	Humanities/Social Science Course	3			
<b>Total Credits</b>		<b>14</b>	<b>Total Credits</b>		<b>15</b>
Second Year – Fall Semester			Second Year – Spring Semester		
MATH 175	Analytic Geometry and Calculus II <i>MATH 170 with 'C' or better</i>	4	GEOL 249	Mineralogy and Optical Mineralogy (Spring only) <i>GEOL 111/111L or GEOL 101/101L and CHEM 111</i>	4
GEOL 309	Ground Water Hydrology (Fall only) <i>GEOL 101/101L or GEOL 111/111L and MATH 143 with 'C' or better</i>	3	*STAT 251	Statistical Methods <i>MATH 108, 143, 160, 170, or sufficient test scores</i>	3
PHYS 111, 111L	General Physics I with lab <i>MATH 143</i>	4	GEOG 385	GIS Primer <i>Basic knowledge of PC-based operating system</i>	3
	Humanities/Social Science Course	3	PHYS 112, 112L	General Physics II with lab (Spring only) <i>PHYS 111, 111L</i>	4
			*COMM 101	Fundamentals of Oral Communication	2
<b>Total Credits</b>		<b>14</b>	<b>Total Credits</b>		<b>16</b>
Second Year - Summer					
GEOL 290	Field Geology Methods (Summer only) <i>GEOL 101/101L, GEOL 111/111L, or GEOL 102/102L</i>	3			
<b>Total Credits</b>		<b>3</b>			
Third Year – Fall Semester			Third Year – Spring Semester		
GEOL 324	Principles of Stratigraphy and Sedimentation (Fall only) <i>GEOL 102/102L and MATH 143 with 'C' or better</i>	4	ENGL 317	Technical Writing <i>ENGL 102 and Sophomore standing or permission</i>	3
GEOL 326	Igneous and Metamorphic Petrology (Fall only) <i>GEOL 249 and MATH 143 with 'C' or better</i>	4	GEOL 345	Structural Geology (Spring only) <i>MATH 143 with 'C' or better, one semester HS trigonometry or MATH 144, and GEOL 101/101L or GEOL 111/111L, and PHYS 111/111L or PHYS 211/211L</i>	4
GEOL 410	Techniques of Ground Water Study (Fall only) <i>MATH 143 with 'C' or better</i>	3	UPDV ELECTIVE	Other elective(s) as needed	6
	Humanities/Social Science Course	3		American Diversity/International Course	3
<b>Total Credits</b>		<b>14</b>	<b>Total Credits</b>		<b>16</b>
Third Year - Summer					
GEOL 490	Field Geology II (Summer only) <i>GEOL 290 and GEOL 345 and MATH 143 with 'C' or better</i>	3			
<b>Total Credits</b>		<b>3</b>			
Fourth Year – Fall Semester			Fourth Year – Spring Semester		
GEOL 423	Principles of Geochemistry (Fall only) <i>GEOL 249</i>	3	GEOL 422	Principles of Geophysics (Spring only) <i>MATH 143 with 'C' or better</i>	4
HYDR ELECTIVE	Environmental Hydrology Elective <i>Prerequisites vary by course</i>	3	HYDR ELECTIVE	Environmental Hydrology Elective <i>Prerequisites vary by course</i>	3
UPDV ELECTIVE	Other elective(s) as needed	6	UPDV ELECTIVE	Other elective(s) as needed	6
	American Diversity/International Course	3			
<b>Total Credits</b>		<b>15</b>	<b>Total Credits</b>		<b>16</b>

\*Other options available

Requirements subject to change. See UI Catalog for complete degree requirements and additional information.  
*Courses in gold are prerequisites. Courses in italics are co-requisites.* UPDV denotes "upper division"