# **GEOLOGY-BS**

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This is a **General** curriculum guide and is not applicable to every student. It is important to meet with your advisor.

	Year	· One		
<sup>7</sup> CHM 115 Principles of Chemistry I	4	GEO 112 Earth History		4
Prerequisites: High school chemistry, MTH 110 or MTH 122 or		Prerequisite: A course in physical or general geology		
MTH 125 or MTH 201		MTH 123 Trigonometry		3
<sup>7</sup> GEO 111 Exploring the Earth	4	Prerequisite: MTH 122 (can be taken concurrently) or		
MTH 122 College Algebra	3	assignment through math placement exam		
Prerequisite: MTH 110 or assignment through math		GEO 175 Research Tools for Geosciences		1
placement exam	3/4	Prerequisites: GEO 111 and GEO 112 (can be taken		
Gen Ed or WRT 098 Writing with a Purpose – Optional <sup>6</sup>		concurrently).		
		<sup>6</sup> WRT 150 Strategies of Writing		4
		Gen Ed		3
Total	14/15	То	tal	15
	Spring/	Summer		
CHM 116 Principles of Chemistry II		Gen Ed		
Prerequisites: CHM 115 and MTH 122 or MTH 125 or MTH	5			3
201				
		Two		
GEO 211 Mineralogy	4	GEO 212 Petrology		4
Prerequisites: GEO 111 and CHM 115	_	Prerequisites: GEO 112, GEO 211, and CHM 115		
<sup>1</sup> MTH/CIS/STA Elective Course	3-4	<sup>1</sup> MTH/CIS/STA Elective Course		3-4
<sup>2</sup> Geology Elective Course	3-4	<sup>2</sup> Geology Elective Course		3-4
Gen Ed	3	Gen Ed		3
Total	13-15	То	tal	13-15
	Year	Three		
GEO 311 Structural Geology	4	GEO 312 Sedimentation-Stratigraphy		4
Prerequisites: GEO 212 and MTH 123		Prerequisite: GEO 112		
GEO 320 Geomorphology	4	<sup>3</sup> PHY Sequence Course		5
Prerequisite: GEO 211		Gen Ed		3
<sup>3</sup> PHY Sequence Course	5	Issue		3
Gen Ed	3			
Total	16*	То	tal	15
	Year	Four		
GEO 485 Geology Seminar	1	GEO 495: Global Tectonics (Capstone)		3
Prerequisite: Geology or Earth Science major or minor		Prerequisite: GEO 311		
<sup>2</sup> Geology Elective Course	3-5	<sup>5</sup> GEO 485 SWS Geology Seminar		1
<sup>4</sup> Elective	3	<sup>2</sup> Geology Elective Course		3-5
Issue	3	Gen Ed		3
Gen Ed	3	<sup>4</sup> Elective		3
		<sup>4</sup> Elective		3
Total	13-15	То	tal	15-17*

<sup>\*\*</sup>Geology Majors MUST participate in an approved Summer Field Camp in Geology (taught by another college) for 5-8 credits

Online at: <a href="http://www.gvsu.edu/clasadvising">http://www.gvsu.edu/clasadvising</a>

<sup>\*</sup> The block tuition rate is 12-15 credits. You will pay additional tuition for any credits over 15.

<sup>&</sup>lt;sup>1</sup> Geology majors must complete two math, computer science, OR statistics courses. The options are listed on the back of this guide.

<sup>&</sup>lt;sup>2</sup> Geology majors must complete 6-8 credits of 300-400 level geology elective courses. Students are strongly encouraged to consult faculty advisors to help with selecting electives. Geology Theme or Issues courses at the 300-level cannot count towards the Geology major.

<sup>&</sup>lt;sup>3</sup> Geology majors must complete a two semester sequence of physics courses. These options are listed on the back of this guide.

 $<sup>^{\</sup>rm 4}$  Elective refers to any course to help you earn the required 120 credits to graduate.

<sup>&</sup>lt;sup>5</sup> Students must complete a total of two courses with an SWS attribute.

<sup>&</sup>lt;sup>6</sup> Students who self-place into WRT 098 should take this course in the fall semester and then take WRT 150 in the winter semester of their first year. Students who self-place into WRT 150 should normally take this course in the winter semester of their first year.

Students will not need to take WRT 150 if they have earned credit for the course through AP/Dual Enrollment. A grade of C or better is required in WRT 150 in order to satisfy the WRT 150 requirement at GVSU.

<sup>7</sup> Students with an ACT Science Subscore below 22 tend to be more successful if they only take one science course during the Fall semester of Year 1. CHM 109 is recommended prior to CHM 115 if chemistry was not taken in high school or if the ACT science subscore is below 22. However, CHM 109 does NOT count toward the Geology major.

### **Declaring the Geology Major:**

- 1. Log into myBanner from the GVSU homepage
- 2. Once logged in, select "Student," "Student Records," and then "Change Major"
- 3. Click on the "Change Major 1/Program" box
- 4. Click on the down arrow in the box next to "New Major 1/Program"
- 5. From here scroll down and find "Geology-BS"
- 6. Click "Submit" and then click "Change to New Program"

#### **General Education Overlap**

General Education Categories fulfilled by the Geology-BS Major:		
Mathematical Sciences: MTH 122	Physical Science with a Lab: GEO 111	

## **Sequence Courses**

Mathematics/Computer Science/Statistics Elective Courses					
Choose one sequence and complete both courses from that sequence					
Mathematics	Computer Science	Statistics			
MTH 201 Calculus I (4) Prerequisites: (MTH 122 and 123) or placement into MTH 201 via the calculus readiness test MTH 202 Calculus II (4) Prerequisite: MTH 201	CIS 150 Introduction to Computing (3) CIS 162 Computer Science I (4) Prerequisite: MTH 110	STA 215 Introductory Applied Statistics (3) Prerequisite: MTH 110 or equivalent STA 216 Intermediate Applied Statistics (3) Prerequisite: STA 215 or STA 312			

Physics Sequence					
Choose ONE of the two course PHY sequences					
PHY 220 General Physics I (5)	PHY 230 Principles of Physics I (5)				
Prerequisites: MTH 122 and MTH 123	Prerequisite: MTH 201 (MTH 202 is recommended as a corequisite)				
PHY 221 General Physics II (5)	PHY 231 Principles of Physics II (5)				
Prerequisite: PHY 220	Prerequisites: PHY 230 and MTH 202				
For students with the Advanced Waiver/Override for Mathematics based on ACT scores, it is <b>STRONGLY RECOMMENDED</b> that proficiency in MTH 123 – Trigonometry – be demonstrated by either taking the MTH 123 course or by achieving a passing score on the GVSU math placement test <b>PRIOR</b> to taking PHY 220 and 221.					