

BS IN GEOLOGICAL SCIENCES/MS IN MARINE GEOSCIENCES DUAL DEGREE

5 Year B.S/M.S. Program in Geological Sciences and Marine Geosciences

A 5-year B.S. /M.S. in Geological Sciences and Marine Geosciences allows qualified UM Undergraduate students to complete a master's degree in one year of study beyond the B.S. In doing so, students can save both time and money. By the beginning of their junior year students should have obtained a graduate faculty advisor, selected an approved topic for research, and begun work on their senior thesis as preparation for the M.S. In the senior year, students will increase their focus on graduate courses and work closely with their graduate faculty advisor. During the final year, students complete the required M.S. course work while expanding their undergraduate research and completing the M.S. thesis.

For further information and application forms please visit this website (<https://admissions.miami.edu/undergraduate/academics/dual-degree-program/>).

Curriculum Requirements

Code	Title	Credit Hours
BS in Geological Sciences		123
Refer to link below for information on the BS requirements:		
https://bulletin.miami.edu/undergraduate-academic-programs/marine-atmospheric-science/geological-sciences/geological-sciences-bs/ (http://bulletin.miami.edu/graduate-academic-programs/marine-atmospheric-science/marine-geology-geophysics/curriculumtext/)		
MS in Marine Geosciences		30
Refer to link below for information on the MS requirements:		
https://bulletin.miami.edu/graduate-academic-programs/marine-atmospheric-science/marine-geology-geophysics/marine-geology-geophysics-ms/ (http://bulletin.miami.edu/graduate-academic-programs/marine-atmospheric-science/marine-geology-geophysics/curriculumtext/)		
Total Credit Hours		153

Suggested Plan of Study

This is only a sample. There are numerous ways students can create plans of study. Students should feel empowered to use the information listed in the Academic Bulletin to take charge of their education, pursue their own academic interests, and create their own, unique plans of study.

Freshman Year		
Fall		Credit Hours
GSC 110	The Earth System	4
WRS 105	First-Year Writing I	3
MTH 161	Calculus I	4
HUM Course #1		3
	Credit Hours	14
Spring		
GSC 111	Earth System History	4
WRS 107	First-Year Writing II: STEM	3
MTH 162	Calculus II	4
Minor Course #1		3
	Credit Hours	14
Sophomore Year		
Fall		
GSC 260	Earth Materials	4
CHM 121	Principles of Chemistry	4
CHM 113	Chemistry Laboratory I	1
Minor Course #2		3
PS Course #1		3
	Credit Hours	15

Spring			
GSC 440	Petrology		4
MSC 204	Environmental Statistics		3
HUM Course #2			3
Elective #1			4
Credit Hours			14
Junior Year			
Fall			
GSC 360	Depositional and Diagenetic Systems		4
PHY 201	University Physics I for the Sciences		4
PHY 106	College Physics Laboratory I		1
Minor Course #3			3
HUM Course #3			3
Credit Hours			15
Spring			
GSC 231	Field Studies in Earth Systems ¹		2
GSC 380	Paleontology and Stratigraphy		4
GSC 482	Field Methods		2
PHY 202	University Physics II for the Sciences		4
PHY 108	College Physics Laboratory II		1
PS Course #2			3
Credit Hours			16
Summer			
GSC 580	Summer Field Geology		4
Credit Hours			4
Senior Year			
Fall			
MGS 514	Geophysics		3
GSC 561	Communicating Geoscience		2
Minor Course #4			3
PS Course #3			3
Elective #2			4
MGS 611	Earth Surface Processes		3
MGS 614, 682, 635, or 723	Geophysics or Introduction to Seismology or Geological Hazards or Geodynamics		3
Credit Hours			21
Spring			
GSC 480	Structural Geology		4
GSC 411	Research in Geological Sciences ¹		3
MGS 513	Introductory Geochemistry		3
Minor #5			3
Elective #3			3
MGS 613 or 771	Introductory Geochemistry or Diagenesis of Carbonate Sediments		3
Approved Graduate Elective			3
Credit Hours			22
Summer			
Approved Graduate Elective			2
Credit Hours			2

Fifth Year (Graduate Credit Hours Only)		
Fall		
Approved Elective		3
Approved Elective		3
Approved Elective		3
RSM 700	Research Ethics	0
Credit Hours		9
Spring		
MGS 701	Seminar in Marine Geosciences	1
MGS 810	Master's Thesis	3
Credit Hours		4
Summer		
MGS 810	Master's Thesis	3
Credit Hours		3
Total Credit Hours		153

¹ Recommended elective to take for the Geological Sciences B.S. major.