

M.Sc. Marine Geosciences (MMG) - from WiSe 2021/22

Core Subjects 1	Marine Technology	Marine Resources	Climate Change	Professionalization and Complementary Competences
	English	English	English	English/German

Modules Sem. 1	Geophysical Surveying and Observation Technology		Continental Margin Resources		Climate Change I: Fundamentals		Field and Lab Practice		Advanced Digital Competences		
	Title, Form, CP Lect. 1	Geophysical Survey Strategies and Planning	L+E 3	Gas Hydrates, Formation, Detection, Relevance	L+E 2	Earth System Modelling	L+E 4	Field- or Lab-Training Courses in a total Amount of 6 CP	F/L 6	2 out of 6 Block Courses: DEM + FEM, Numerical Methods, Time Series Analysis, GMT, Seismic data Processing, Seismic Interpretation with Commercial Software Packages	BC 6
	Title, Form, CP Lect. 2	Observation Technologies	L+E 3	Applied Petroleum Geology	L+E 2	The Role of High Latitudes Oceans in Climate Change	L+E 2				
	Title, Form, CP Lect. 3			Hydrocarbon Formation and Petroleum Exploration	L+E 2						
		6 SWS			6 SWS			6 SWS			5 SWS

Modules Sem. 2	Drilling, In-situ Measurements, Robotic Systems		Deep-Sea Resources		Climate Change II: Models and Data		Field; Marine and Lab Practice		General Studies - Complementary Competences			
	Title, Form, CP Lect. 1	Drilling/Logging	L+E 2	Marine Resources in Space and Time	L+E+S 6	Abrupt, Past and Future Climate Changes	L+E 6	Marine Field- or Lab-Training Courses in a total Amount of 6 CP	F/L 6	Complementary Courses, e.g. Languages, Economics, Law in the total Amount of 6 CP	GS 6	
	Title, Form, CP Lect. 2	In-situ Technologies	L+E 2									
	Title, Form, CP Lect. 3	Marine Robotics	L+E 2									
		4 SWS			4 SWS			5 SWS			6 SWS	6 SWS

Core Subjects 2	Environmental Archives	Ocean Crust Evolution	Sedimentary Structures	Marine Geobiology	Biogeochemistry
	English	English	English	English	English

Modules Sem. 1	Environmental Archives Methods		Magmatic and Hydrothermal Processes		Sedimentary Structures of Shelves and Passive Margins		Evolution of Marine Ecosystems		Biogeochemical Processes: Concepts		
	Title, Form, CP Lect. 1	Marine Ecosystems	L+E 1.5	Magmatic and Hydrothermal Processes	L+E 6	Seismic and Acoustic Imaging of Sedimentary Structures	L+E 1	Evolution of Marine Ecosystems	L+E+S 6	Inorganic Geochemistry	L+E 2.5
	Title, Form, CP Lect. 2	Stable Isotopes + Trace Elements	L+E 1.5			Sedimentary Structures and Processes at Passive Margins	L+E 2.5			Marine Microbes	L+E 1
	Title, Form, CP Lect. 3	Terrigenous Signals	L+E 1.5			Sedimentology and Ecology of Shelves	L+E 2.5			Molecular Geochemistry	L+E 2.5
	Title, Form, CP Lect. 4	Environmental Magnetism	L+E 1.5								
		4 SWS			4 SWS			4 SWS			5 SWS

Modules Sem. 2	Environmental Archives Projects		Geophysics of Plates, Mantle and Margins		Sedimentary Structures of Active Margins		Marine Molecular Geobiology		Biogeochemical Processes: Projects			
	Title, Form, CP Lect. 1	Environmental Archives Project	PE 6	Geophysics of Plates, Mantle and Margins	L+E 6	Sedimentary Structures: Active Margins	L+E 6	Molecular Geobiology	L 4.5	Biogeochemistry Projects	PE 6	
	Title, Form, CP Lect. 2							Current Topics in Geobiology	S 1.5			
	Title, Form, CP Lect. 3											
		4 SWS			4 SWS			4 SWS			5 SWS	6 SWS

Project + Sci. Train.	Geoscientific Project		Research Seminar	
	English/German		English	

Modules Sem. 3	Geoscientific Project		Research Seminar		
	Title, Form, CP Lect. 1	Geoscientific Project	PE 15	Research Seminar	S 15
			4 SWS		

Master Thesis	Master Thesis			
	English			

Modules Sem. 4	Master Thesis Module				
	Title, Form, CP Lect. 1	Master Thesis (22 weeks) and Oral Master Defense (ca. 1 hour)			MT 30
					30 SWS