

Study and Examination Plan

Earth and Environmental Sciences (EES)																						
Matriculation Fall 2022																						
Program-Specific Modules						Type	Assessment	Period	Status ¹	Sem.	CP	Jacobs Track Modules (General Education)										
Year 1 - CHOICE												Year 1 - CHOICE										
Take the mandatory CHOICE modules listed below, this is a requirement for the EES program																						
Unit: EES (default minor)												Unit: Methods / Skills										
CH-130 Module: General Earth and Environmental Sciences (default minor)						m 1 7.5						JTMS-MAT-07 Module: Mathematical Concepts for the Sciences										
CH-130-A	Structure and Geological Evolution of the Earth	Lecture										JTMS-07	Mathematical Concepts for the Sciences	Lecture	Written exam	Examination period	m 1 5					
CH-130-B	Structure and Dynamics of the Earth's Atmosphere and Oceans	Lecture																				
CH-130-C	Anthropogenic Impact on the Earth's Surface Environment	Lecture / Field Lab																				
CH-131 Module: General Geosciences (default minor)						m 2 7.5						JTMS-SCI-15 Module: Chemistry for Natural Scientists										
CH-131-A	Volcanism and Metamorphism	Lecture										JTMS-15	Chemistry for Natural Scientists	Lecture	Written exam	Examination period	m 2 5					
CH-131-B	Sedimentology	Lecture																				
CH-131-C	Structural Geology	Lecture																				
Unit: CHOICE (own selection)						1+2 30						Unit: Language										
Take four further CHOICE modules from those offered for all other study programs ²													German is default language. Native German speakers take modules in another offered language.									
												JTLA-xxx Module: Language 1										
												JTLA-xxx						Language 1	Seminar	Various	Various	me 1 2.5
												JTLA-xxx Module: Language 2										
												JTLA-xxx						Language 2	Seminar	Various	Various	me 2 2.5
Year 2 - CORE													Year 2 - CORE									
Take all CORE modules listed below or replace 15 CP with suitable CORE modules from other study programs ²																						
Unit: Marine Environmental Science (default minor)						me 3 7.5						Unit: Methods / Skills										
CO-460 Module: Environmental Science (default minor)						me 3 7.5						Select from Methods / Skills modules offered in the Fall semester										
CO-460-A	Marine Environments	Lecture										JTMS-xxx-xx	Module: Methods (own selection)		Various	Various	me 3 5					
CO-460-B	Environmental Geochemistry	Lecture																				
CO-460-C	Environmental Mineralogy	Lecture																				
CO-461 Module: Oceanography (default minor)						me 4 7.5						JTMS-SCI-17 Module: Physics for the Natural Sciences										
CO-461-A	Physical Oceanography	Lecture										JTMS-17	Physics for the Natural Sciences	Lecture	Written exam	Examination period	m 2 5					
CO-461-B	Marine Geophysics	Lecture																				
CO-461-C	Oceanographic Research Cruise	Field Lab																				
Unit: Geochemistry and Resources						me 4 7.5						Unit: Language										
CO-462 Module: Geochemistry of Igneous and Aqueous Systems						me 4 7.5						German is default language. Native German speakers take modules in another offered language.										
CO-462-A	Igneous Trace Element and Radiogenic Isotope Geochemistry	Lecture										JTLA-xxx	Module: Language 3				m 3 2.5					
CO-462-B	Aqueous and Marine Geochemistry	Lecture										JTLA-xxx	Language 3		Seminar	Various	Various	me 2.5				
CO-462-C	Stable Isotope Geochemistry	Lecture																				
CO-463 Module: Mineral, Metal and Water Resources						me 3 7.5						JTLA-xxx Module: Language 4										
CO-463-A	General Mineral Resources	Lecture										JTLA-xxx	Language 4		Seminar	Various	Various	me 4 2.5				
CO-463-B	Critical High-Technology Metals: Resources and Environmental Impact	Lecture																				
CO-463-C	Fieldcamps: Geology, Metals and Freshwater Resources	Field Lab																				
Unit: Earth Data Science and Remote Sensing						me 4 7.5																
CO-464 Module: Earth Data Science						me 4 7.5																
CO-464-A	Surface and Subsurface Systems: Data, Models, and Processes	Lecture																				
CO-464-B	Marine and Atmospheric Systems: Data, Models, and Processes	Lecture																				
CO-464-C	Introduction to Geographic Information Systems	Lecture																				
CO-465 Module: Geophysical Remote Sensing						me 3 7.5																
CO-465-A	Earth and Planetary Surfaces in Remote Sensing Data	Lecture																				
CO-465-B	Climate System Dynamics Observed from Space	Lecture																				
CO-465-C	Global Geophysical Fields and Models	Lecture																				
Year 3 - CAREER													Year 3 - CAREER									
CA-INT-900 Module: Internship / Startup and Career Skills						m 4/5 15						Unit: Big Questions										
CA-INT-900-0	Internship / Startup and Career Skills	Internship	Report/Business Plan	During the 5 th semester								JTBQ-xxx	Module: Big Questions					m 5/6				
Module Code Module: Seminar / Thesis EES						m 6 15						Take a total of 10 CP of Big Questions modules (each 2.5 or 5 CP) as mandatory elective										
CA-EES-800-T	Thesis EES			15 th of May														me 10				
CA-EES-800-S	Seminar EES			During the semester														5				
Unit: Specialization EES						m 15						JTCL-CI-950 Module: Community Impact Project										
Take a total of 15 CP of specialization modules													JTCL-950									
CA-S-EES-801	Advanced Earth and Environmental Sciences Field Lab	Field Lab	Project Report	During the semester														m 5 5				
CA-S-EES-802	Global Change and Systems Thinking	Lecture	Oral Exam	Examination period														5				
CA-S-EES-803	Modelling of Earth System Data	Lecture	Term Paper	Examination period														5				
CA-S-EES-804	Current Topics in Earth and Environmental Sciences	Seminar	Term Paper	Examination period														5				
Total CP													Total CP									
													180									

¹ Status (m = mandatory, me = mandatory elective)

² For a full listing of all CHOICE / CORE / CAREER / Jacobs Track modules please consult the [CampusNet online catalogue](#) and/or the study program handbooks.