Earth and Environmental Sciences (EES)

Matriculation Fall 2020

	Program-Specific Modules	Type	Assessment	Period	Status[1]	Sem.	CP
Year 1 - CHOICE							**45**
Take the mandatory CHOICE modules listed below, this is a requirement for the EES program							
	Unit: EES (default minor)						**15**
CH-130	**Module: General Earth and Environmental Sciences** (default minor)				**m**	**1**	**7.5**
CH-130-A	Structure and Geological Evolution of the Earth	Lecture	Written Exam	Examination period			2.5
CH-130-B	Structure and Dynamics of the Earth's Atmosphere and Oceans	Lecture					2.5
CH-130-C	Anthropogenic Impact on the Earth's Surface Environment	Lecture / Field Lab					2.5
CH-131	**Module: General Geosciences** (default minor)				**m**	**2**	**7.5**
CH-131-A	Volcanism and Metamorphism	Lecture	Oral Exam	Examination period			2.5
CH-131-B	Sedimentology	Lecture					2.5
CH-131-C	Structural Geology	Lecture					2.5
	Unit: CHOICE (own selection)					**1+2**	**30**
Take four further CHOICE modules from those offered for all other study programs[2]							
Year 2 - CORE							**45**
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)						**15**
CO-460	**Module: Environmental Science** (default minor)				**me**	**3**	**7.5**
CO-460-A	Marine Environments	Lecture	Written Exam	Examination period			2.5
CO-460-B	Environmental Geochemistry	Lecture					2.5
CO-460-C	Environmental Mineralogy	Lecture					2.5
CO-461	**Module: Oceanography** (default minor)				**me**	**4**	**7.5**
CO-461-A	Physical Oceanography	Lecture	Written Exam	Examination period			2.5
CO-461-B	Marine Geophysics	Lecture					2.5
CO-461-C	Oceanographic Research Cruise	Field Lab					2.5
	Unit: Geochemistry and Resources						**15**
CO-462	**Module: Geochemistry of Igneous and Aqueous Systems**				**me**	**3**	**7.5**
CO-462-A	Igneous Trace Element and Radiogenic Isotope Geochemistry	Lecture	Written Exam	Examination period			2.5
CO-462-B	Aqueous and Marine Geochemistry	Lecture					2.5
CO-462-C	Stable Isotope Geochemistry	Lecture					2,5
CO-463	**Module: Mineral, Metal and Water Resources**				**me**	**4**	**7.5**
CO-463-A	General Mineral Resources	Lecture	Written Exam	Examination period			2.5
CO-463-B	Critical High-Technology Metals: Resources and Environmental Impact	Lecture					2.5
CO-463-C	Fieldcamp: Geology, Metals and Freshwater Resources	Field Lab					2.5
	Unit: Earth Data Science and Remote Sensing						**15**
CO-464	**Module: Earth Data Science**				**me**	**3**	**7.5**
CO-464-A	Surface and Subsurface Systems: Data, Models, and Processes	Lecture	Written Exam	Examination period			2.5
CO-464-B	Marine and Atmospheric Systems: Data, Models, and Processes	Lecture					2.5
CO-464-C	Introduction to Geographic Information Systems	Lecture					2.5
CO-465	**Module: Geophysical Remote Sensing**				**me**	**4**	**7.5**
CO-465-A	Earth and Planetary Surfaces in Remote Sensing Data	Lecture	Project Report	During the Semester			2.5
CO-465-B	Climate System Dynamics Observed from Space	Lecture					2.5
CO-465-C	Global Geophysical Fields and Models	Lecture					2.5
Year 3 - CAREER							**45**
CA-INT-900	**Module: Internship / Startup and Career Skills**				**m**	**4/5**	**15**
CA-INT-900-0	Internship / Startup and Career Skills	Internship	Report/Business Plan	During the 5th semester			15
Module Code	**Module: Seminar / Thesis EES**				**m**	**6**	**15**
CA-EES-800-T	Thesis EES		Thesis and Presentation	15th of May			12
CA-EES-800-S	Seminar EES			During the semester			3
	Unit: Specialization EES				**m**		**15**
Take a total of 15 CP of specialization modules							
CA-S-EES-801	Advanced Earth and Environmental Sciences Field Lab	Field Lab	Project Report	During the semesterd	me	5	5
CA-S-EES-802	Global Change and Systems Thinking	Lecture	Oral Exam	Examination period	me	5	5
CA-S-EES-803	Modelling of Earth System Data	Lecture	Project Report	Examination period	me	5	5
CA-S-EES-804	Current Topics in Earth and Environmental Sciences	Seminar	Project Report	Examination period	me	6	5
Total CP							**45**

[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.

	Jacobs Track Modules (General Education)	Type	Assessment	Period	Status[1]	Sem.	CP
Year 1 - CHOICE							**15**
	Unit: Methods / Skills						**10**
JTMS-MAT-07	**Module: Mathematical Concepts for the Sciences**				**m**	**1**	**5**
JTMS-07	Mathematical Concepts for the Sciences	Lecture	Written exam	Examination period	m	1	5
JTMS-SCI-15	**Module: Chemistry for Natural Scientists**				**m**	**2**	**5**
JTMS-15	Chemistry for Natural Scientists	Lecture	Written exam	Examination period	m	2	5
	Unit: Language				**m**		**5**
	German is default language. Native German speakers take modules in another offered language.						
JTLA-xxx	**Module: Language 1**				**m**	**1**	**2.5**
JTLA-xxx	Language 1	Seminar	Various	Various	me		2.5
JTLA-xxx	**Module: Language 2**				**m**	**2**	**2.5**
JTLA-xxx	Language 2	Seminar	Various	Various	me		2.5
Year 2 - CORE							**15**
	Unit: Methods / Skills						**10**
	Select from Methods / Skills modules offered in the Fall semester						
JTMS-xxx-xx	**Module: Methods (own selection)**		**Various**	**Various**	**me**	**3**	**5**
JTMS-SCI-17	**Module: Physics for the Natural Sciences**				**m**	**4**	**5**
JTMS-17	Physics for the Natural Sciences	Lecture	Written exam	Examination period			5
	Unit: Language						**5**
	German is default language. Native German speakers take modules in another offered language.						
JTLA-xxx	**Module: Language 3**				**m**	**3**	**2.5**
JTLA-xxx	Language 3	Seminar	Various	Various	me		2.5
JTLA-xxx	**Module: Language 4**				**m**	**4**	**2.5**
JTLA-xxx	Language 4	Seminar	Various	Various	me		2.5
Year 3 - CAREER							**15**
	Unit: Big Questions						**10**
JTBQ-xxx	Module: Big Questions				**m**	**5/6**	
Take a total of 10 CP of Big Questions modules (each 2.5 or 5 CP) as mandatory elective		Various	Various	Various	**me**		10
	Unit: Community Impact Project						**5**
JTCI-CI-950	**Module: Community Impact Project**				**m**	**5**	**5**
JTCI-950	Community Impact Project	Project	Project	Examination period			5