

Master of Science (M.Sc.) Tropical Hydrogeology and Environmental Engineering (TropHEE)



Study and Examination Schedule (Annex I)

Legend		Study achievements					Course			Semester				
Grading systems:	St = standard (with grades); bnb = pass/fail (without grades)	Technical exam	Course work	Assessment type	Duration (min)	Weighting *	SWS	Status	Course type	Total credits	The allocation of exams to specific semesters has recommendatory character only.			
Assessment types:	s = written exam; SF = special form; R = presentation; T = participation only; f = facultative										Workload per semester (CP)			
Exam duration:	Duration of examination in minutes									CP	1.	2.	3.	4.
Weighting:	Courses: weighting of an assessment mark for calculation of the module grade; modules: weighting of the module grade for calculation of the GPA													
SWS:	Class hours per week													
Status:	o = obligatory; f = facultative													
Course types:	VL = lecture; VÜ = lecture with exercises; PR = practical lab/field course; EK = field trip; PS = project seminar													
CP:	Credits (ECTS)													
TUCaN numbers and the assignment of CP to individual module elements are for information purposes only. Credits are only awarded after completion of the respective module.														
Compulsory Modules (24 CP)										24				
11-02-3431	CM1 Semiarid Field Hydrogeology					8	o			6				
11-02-3272-ek	Field Trip to a Semiarid Region		bnb	T	0	8	o	EK				6		
11-02-3402	CM2 Scientific Methods					2	o			6				
11-02-3402-se	Project Seminar		St	R	1	2	o	PS			6			
11-02-3403	CM3 Scientific Training					0	o			12				
	- Scientific training / internship		St	s	1		o	PR				12		
Elective Modules (minimum 66 CP)										99				
Basic Modules														
11-02-3421	BM1 Fundamentals of Geosciences					4	f			6				
11-02-3404-vu	Geological Methods		St		f	1	2	f	VÜ		3			
11-02-3405-vu	Practical Mineralogy and Petrology					2	f	VÜ		3				
11-02-3406	BM2 Hydrogeology I					4	f			6				
11-02-3406-vu	Hydrogeology I		St		f	1	3	f	VÜ		4			
11-02-3271-ek	Hydrogeological Field Trips			bnb	T	0	1	f	EK		2			
11-02-3422	BM3 Hydrochemistry and Physical Hydrogeology					4	f			6				
11-02-2031-vu	Hydrochemistry		St		f	1	2	f	VÜ		3			
11-02-3407-vl	Physical Hydrogeology					2	f	VL		3				
11-02-3408	BM4 Geoinformation Systems					6	f			6				
11-02-2242-vu	GIS I (Techniques)					3	f	PR			3			
11-02-2243-vu	GIS II (Case studies)		St		f	1	3	f	PR			3		
Special Modules														
11-02-3418	SM1 Hydraulic Engineering					4	f			6				
11-02-3221-vu	Well Construction		St		f	1	2	f	VÜ		3			
11-02-3223-vl	Water Supply Systems					2	f	VL		3				
11-02-3417	SM2 Hydrogeological Methods					7	f			6				
11-02-3214-vu	Water Analysis			St	SF	1	3	f	VÜ		3			
11-02-3417-pr	Hydrogeological Field Course			St	SF	1	4	f	PR			3		
11-02-3410	SM3 Soil and Unsaturated Zone					4	f			6				
11-02-3212-vu	Soil Erosion and Protection			St	R	1	2	f	VÜ		3			
11-02-3410-vu	Unsaturated Zone Processes/Groundwater Recharge		St		f	1	2	f	VÜ			3		
11-02-2223	SM4 Hydrogeochemistry					4	f			6				
11-02-2111-vu	Contaminant Hydrogeochemistry		St		f	1	4	f	VÜ			6		
11-02-3412	SM5 Hydrogeology of Semiarid Areas					4	f			6				
11-02-3411-vl	Salinization of Groundwaters		St		f	1	2	f	VL			3		
11-02-3412-vl	Fossil Groundwater Systems					2	f	VL			3			
11-02-3411	SM6 Aquifer Sedimentology					6	f			6				
11-02-2175-vl	Sedimentary Basins		St		f	1	2	f	VL			3		
11-02-2172-pr	Field Course Sedimentology			St	SF	1	4	f	PR			3		

11-02-3413	SM7 Geophysical Methods					5	f	X	6					
11-02-1232-vu	Geophysical Field Methods	St	SF		1	3	f	PR			3			
11-02-2253-pr	Ground Penetrating Radar (GPR)	St	SF		1	2	f	PR			3			
11-02-3415	SM8 Groundwater Modelling					4	f	X	6					
11-02-3252-vu	Groundwater Modelling I	St	f	1	2	f	VÜ	VÜ			3			
11-02-3416-vu	Groundwater Modelling II												2	f
11-02-3419	SM9 Water Management					4	f	X	6					
11-02-3419-vu	Integrated Water Resources Management (IWRM)	St	f	1	2	f	VÖ	VL			3			
11-02-2121-vl	Water Treatment												2	f
11-02-2238	SM10 Clay Mineralogy					2	f	X	3					
11-02-2044-vu	Clay Mineralogy	St	f	1	2	f	VL	VL			3			
11-02-2045-vu	Applied Clay Mineralogy												2	f
11-02-3420	SM11 Geoenvironmental Engineering					4	f	X	6					
11-02-3420-vl	Waste disposal	St	f	1	2	f	VL	VL			3			
11-02-2112-vl	Contaminated sites												2	f
11-02-3414	SM12 Isotope and Tracer Techniques					4	f	X	6					
11-02-3253-vl	Isotope Hydrology and Dating	St	f	1	2	f	VÜ	VÜ			3			
11-02-3254-vu	Tracer Techniques												2	f
11-02-3416	SM13 Remote Sensing and Statistics					5	f	X	6					
11-02-2244-vu	Remote Sensing in Geology	St	f	1	3	f	VÜ	VÜ			3			
11-02-2183-vu	Statistics												2	f
Master Thesis (30 CP)		St	s							30			30	
Total CP										120	30	30	30	30

* Weighting: The module grades are calculated from the assessment marks weighted by their ECTS credits.
The GPA is calculated from the module grades weighted by their ECTS credits.