

Qualification Program: Area A (Doctoral thesis including dissertation and defense) and Area B Course Program (research and key qualifications). Part B1 summarizes research qualification courses, *compulsory courses.

Qualification Areas	TransTiP CP	CPs needed	
A Doctoral Thesis (dissertation and defense)	120		
B Research Qualifications and Key Qualifications	≥ 60		
B.1 Research Qualifications			
* Thesis proposal (year 1)			
- Preparation of doctoral thesis proposal (10 pages, incl. work and time schedule)	10 CP	12	
- Presentation and defense (BS, May 2018)	2 CP		
* Long-term stay in the partner country	1 CP / month	6	
Summer Schools: Lecture series with focus on Sediment (year 1), Water (year 2) and Carbon (year 3); lectures by 4-5 guest scientists, doctoral and participating researchers; hands-on exercises and outdoor classes.			
* - 2018 (10 days; before or after field work)	3 CP		
* - 2019 (10 days; TPE Science & Technology Training)	3 CP		
* - 2020 (5 days, in Germany)	2 CP		
* - Organisation of Doctoral Congress during Summer Schools (by one third of doctoral researchers each year)	1 CP	12	
* - Oral or poster presentation at Doctoral Congress	1 CP / presentation		
- Inviting visiting scientists (international keynote speakers)	1 CP		
- Evaluation of qualification program			
* Research Seminar (presentation once a year)			
- Presentation and discussion of research status in years 2 (H+BS) and 3 (J+BS)	2 CP / presentation	4	
* Literature Seminar (presentation once a year)			
- Preparation of fieldwork in year 1 (LUH+FSUJ)	2 CP / presentation	6	
- Review of current research topics in years 2 (FSUJ) and 3 (LUH)			
* Short courses (2-3 days)			
- Remote Sensing of Earth Surface Changes (Baade, Riedel)	2 CP / course	6	
- Water fluxes and Water Quality (Graf, Schwab)			
- Carbon Cycle (Guggenberger, Sierra)			
Specializing and leveling short courses (2-5 days), depending on qualification of doctoral researchers. Special courses from the BSc and MSc curricula TUBS, LUH and FSUJ to finetune doctoral researchers individual capabilities during the first year, and to balance out unavoidable, individual, subject-related deficiencies.			
- Sediment analysis	- Quantification of erosion rates	2 CP / course	
- Stable isotopes	- Ecohydrological and water balance modeling		
- Applied geophysics	- Measurements and modeling of natural systems		
- Groundwater hydrology			
- Soil water and sediments			
Review of scientific paper of peers	1 CP / review	0	
Peer-reviewed publication first authorship	5 CP submitted, 10 CP accepted	0	
Peer-reviewed publication co-authorship	2 CP submitted, 4 CP accepted	0	
Presentations at international congresses	6 CP / talk, 2 CP / poster	0	
B.2 Key Qualifications (4 CP compulsory)			
* Workshop on "Good Scientific Practice"	1 CP	1	
Transferable skill courses offered by Graduate Academies (e.g. Graduate Academy and Graduate School of Natural Sciences (GRANAT) at LUH, Graduate Academy at FSUJ, GradTUBS and fiMINT at TUBS):			
- Applying for a job on the international market	- Project Management	0.5 CP / course day	
- Communication Skills	- Proposal Writing		
- * Data management	- Scientific writing		
- Language courses	- Software (R, Excel, Citavi etc.)		
- Leadership Skills in Academia and Industry	- Speech and vocal training		
- Living and working in Germany	- Time Management		
- Networking	- Work-Life-Balance		
Teaching competences			
Training and supervision of BSc and MSc students	CP depending on effort		0 - 3
Outreach (e.g., „Future Day“, „Kinder-Uni“)			
Gender equality			
- Juggling career and family	0.5 CP / course day	0 - 3	
- Career-Building-measures			
- Gender and diversity competence			
Σ CPs from compulsory curricular elements specified above		50	