

Module title		Abbreviation
Analysis 1		10-M-ANA1-152-m01
Module coordinator		Module offered by
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics
ECTS	Method of grading	Only after succ. compl. of module(s)
8	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Real numbers and completeness; basic topological notions; convergence and divergence of sequences and series; power series and Taylor series; basics in differential calculus in one variable; basics of integral calculus in one variable (Riemann integral and improper integral).		
Intended learning outcomes		
The student knows and masters the essential methods and notions of analysis. He/She is acquainted with the central proof methods in analysis and can employ them to solve easy problems. He/she is able to perform easy mathematical arguments independently and to express mathematical arguments precisely and clearly in written form.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (4) + Ü (2)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 90 to 180 minutes) and written exercises (approx. 12 exercise sheets with approx. 4 exercises each) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
240 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Mathematics (2015) Bachelor' degree (1 major) Economathematics (2015) Bachelor' degree (1 major) Mathematical Physics (2015) Bachelor' degree (1 major) Computational Mathematics (2015) Bachelor' degree (1 major) Mathematical Physics (2016) Bachelor' degree (1 major) Economathematics (2017) Module studies (Bachelor) Mathematics (2019) Module studies (Bachelor) Orientierungsstudien (2020) Bachelor' degree (1 major) Economathematics (2021) exchange program Mathematics (2023) Bachelor' degree (1 major) Mathematics (2023)		

