

Module title		Abbreviation
Introduction to Elementary Number Theory (virtual course)		10-M-VHBZth-191-mo1
Module coordinator		Module offered by
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics
ECTS	Method of grading	Only after succ. compl. of module(s)
3	(not) successfully completed	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
The course gives a brief introduction to mathematical working techniques (propositional logic, sets, definitions, proofs), introduces the different number domains, discusses elementary divisibility properties of the integers (including modular arithmetics) and introduces continued fractions and their approximation properties.		
Intended learning outcomes		
The students get acquainted with the mathematical language, apply easy deduction techniques to elementary number theoretic questions, and get a first impression of the multifarious applications.		
Courses (type, number of weekly contact hours, language – if other than German)		
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)		
project (web-based, 15 to 20 hours) Assessment offered: Once a year, winter semester Other: E-Learning, Vhb		
Allocation of places		
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Additional information		
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Workload		
90 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 22 II Nr. 3 f)		
Module appears in		
First state examination for the teaching degree Gymnasium Mathematics (2019)		