Module title	Abbreviation
Basics in Mathematics (German Grundschule/Hauptschule/Gymnasium)	10-M-M1GHR-092-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)
15	numerical grade	--

Duration	Module level	Other prerequisites
2 semester	undergraduate	--

Contents

Introduction to the two most important basic fields of mathematics: linear algebra and analysis.

Intended learning outcomes

The students is acquainted with the basic methods, concepts and results in analysis and linear algebra. He/She is able to comprehend the central proof methods, can perform easy mathematical arguments and present them orally and in written form. He/She can analyse basic mathematical problems and employ methods of analysis and linear algebra to solve them.

Courses (type, number of weekly contact hours, language — if other than German)

This module comprises 3 module components. Information on courses will be listed separately for each module component.
- 10-M-M1GHR-P-092: M (no information on SWS (weekly contact hours) and course language available)
- 10-M-M1GHR-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available)
- 10-M-M1GHR-2-092: V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.

Assessment in module component 10-M-M1GHR-P-092: Basics in Mathematics (German Grundschule/Hauptschule/Gymnasium)
- 1 ECTS, Method of grading: numerical grade
- written examination (approx. 120 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 30 minutes) or an oral examination in groups (groups of 2: approx. 45 minutes, groups of 3: approx. 60 minutes) or by a written and/or multi-media portfolio (as announced)
- Only after successful completion of module components: Successful completion of the two module components 10-M-M1GHR-1 and 10-M-M1GHR-2 is a prerequisite for participation in module component 10-M-M1GHR-P.

Assessment in module component 10-M-M1GHR-1-092: Basics in Mathematics - Linear Algebra (German Grundschule/Hauptschule/Gymnasium) Basics in Mathematics - Linear Algebra (German Grundschule/Hauptschule/Gymnasium)
- 8 ECTS, Method of grading: (not) successfully completed
- exercises: At the beginning of the course, the lecturer will specify the type and scope of exercises to be successfully completed over the course of the semester for the module component to be considered successfully completed.

Assessment in module component 10-M-M1GHR-2-092: Basics in Mathematics - Analysis in one Variable (German Grundschule/Hauptschule/Gymnasium) Basics in Mathematics - Analysis in one Variable (German Grundschule/Hauptschule/Gymnasium)
- 6 ECTS, Method of grading: (not) successfully completed
- exercises: At the beginning of the course, the lecturer will specify the type and scope of exercises to be successfully completed over the course of the semester for the module component to be considered successfully completed.

Allocation of places
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Additional information
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Workload
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Teaching cycle
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Referred to in LPO I (examination regulations for teaching-degree programmes)
§ 51 (1) 1. Mathematik Differential- und Integralrechnung, Gewöhnliche Differentialgleichungen § 51 (1) 2. Mathematik Lineare Algebra und Analytische Geometrie
Module appears in
First state examination for the teaching degree Grundschule Mathematics (2009) First state examination for the teaching degree Hauptschule Mathematics (2009) First state examination for the teaching degree Realschule Mathematics (2009) First state examination for the teaching degree Mittelschule Mathematics (2013)