# Module Overview

**Module title**: Analysis for Mathematical Physics

**Abbreviation**: 10-M-ANP-Ü-152-m01

**Module coordinator**: Dean of Studies Mathematik (Mathematics)

**Module offered by**: Institute of Mathematics

**ECTS**: 12

**Method of grading**: Numerical grade

**Duration**: 1 semester

**Module level**: Undergraduate

**Other prerequisites**: None

## Contents

Real numbers and completeness, basic topological notions, convergence and divergence of sequences and series, differential and integral calculus in one variable, further topological considerations, differential calculus with a focus on functions in several variables.

## Intended learning outcomes

The student knows and masters the essential methods and proof techniques of analysis and is able to apply them independently, He/She has an overview over the fundamental notions and concepts of analysis, their analytic background and geometric interpretation, and can interconnect them and express them adequately in written and oral form.

## Courses

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<th>Type</th>
<th>Number of Weekly Contact Hours</th>
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## Method of assessment

Oral examination of one candidate each (20 to 40 minutes).

Assessment will have reference to the contents of modules 10-M-ANA-1 and 10-M-ANP-Ü.

Language of assessment: German and/or English

## Allocation of places

None.

## Additional information

None.

## Referred to in LPO I

Examination regulations for teaching-degree programmes.

## Module appears in

- Bachelor' degree (1 major) Mathematical Physics (2015)
- Bachelor' degree (1 major) Mathematical Physics (2016)