## Module title
Introduction to Functional Analysis for Business Mathematics

## Abbreviation
10-M-FAB-152-m01

### Module coordinator
Dean of Studies Mathematik (Mathematics)

### Module offered by
Institute of Mathematics

### ECTS
10

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
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### Duration
1 semester

### Module level
undergraduate

### Other prerequisites
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## Contents
Banach spaces and Hilbert spaces, bounded operators, principles of functional analysis.

## Intended learning outcomes
The student knows the fundamental concepts and methods of functional analysis as well as the pertinent proof methods, is able to apply methods from linear algebra and analysis to functional analysis, and realises the broad applicability of the theory to other branches of mathematics.

## Courses
(V (4) + Ü (2))

## Method of assessment
(a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate)

Language of assessment: German and/or English

creditable for bonus

## Allocation of places
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## Additional information
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## Referred to in LPO 1
(examination regulations for teaching-degree programmes)

## Module appears in
- Bachelor' degree (1 major) Economathematics (2015)
- Bachelor' degree (1 major) Economathematics (2017)
- Bachelor' degree (1 major) Economathematics (2021)