

COURSE DETAIL

FUNCTIONAL ANALYSIS I

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

105

UCEAP Course Suffix**UCEAP Official Title**

FUNCTIONAL ANALYSIS I

UCEAP Transcript Title

FUNCTIONAL ANALYS I

UCEAP Quarter Units

11.00

UCEAP Semester Units

7.30

Course Description

The following topics are covered in this course on functional analysis: topological spaces; metric spaces, Baire's theorem; normed spaces; compact and convex sets; linear operators, dual space; Hahn-Banach theorem and corollaries; open mapping, closed graph, and Banach-Steinhaus theorem; weak convergence and weak topology; Hilbert Spaces and Riesz Representation theorem; orthogonality and bases; compact operators; the spectrum of an operator; spectral theory for compact operators.

Language(s) of Instruction

English

Host Institution Course Number

3236 L 117/118

Host Institution Course Title

FUNCTIONAL ANALYSIS I

Host Institution Campus

FAKULTÄT II MATHEMATIK UND NATURWISSENSCHAFTEN

Host Institution Faculty**Host Institution Degree****Host Institution Department**

Mathematik

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