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 Course Details

Host Institution Campus
FAKULTÄT II MATHEMATIK UND NATURWISSENSCHAFTEN

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematik

Course Last Reviewed

Print