Modules in Mathematics in English Language

Module identifiers and titles:

MATH-411: Advanced topics in pure mathematics I
MATH-412: Advanced topics in applied mathematics I
MATH-413: Advanced topics in pure mathematics II
MATH-414: Advanced topics in applied mathematics II
MATH-415: Additional topics in mathematics I
MATH-416: Additional topics in mathematics II
MATH-417: Advanced topics in mathematics III
MATH-418: Advanced topics in mathematics IV

Each course consists of lectures (4 hours per week) with an integrated or an additional (2 hours per week) exercise group and yields 9 ECTS credit points.

The topics treated in these courses change from semester to semester. Examples include (ST = Summer Term [“Sommersemester”], WT = Winter Term [“Wintersemester”]):

ST 2022: Mathematical Finance, Riemannian Surfaces, Algebraic Topology, Monte Carlo and Quasi-Monte Carlo Methods


WT 2020/21: Algebraic Number Theory, Mathematical Aspects of Quantum Mechanics, Multivariate Statistics, Stochastic Processes


WT 2018/19: High-Dimensional Approximation, Homological Algebra, Tropical Combinatorics, Functional Analysis, Stochastic Processes

ST 2018: Combinatorial Algebra, Mathematical Aspects of Quantum Mechanics, Probability Theory II

Additional Courses in English include:

ST 2022: Mathematics for Cognitive Science (Lectures, 6 ECTS credit points)
ST 2021: Models of the Corona Pandemic (Seminar, MATH-421, 3 ECTS credit points)