Level: bachelor

Course title: Complex Analysis (M4-12)

Status: obligatory

ECTS: 7

Requirements: passed exam in course Analysis 1 (M4-05)

Learning objectives

Introduction to the basic theory of complex functions and some applications in order to get acquainted with a number of methods and techniques applicable to other parts of mathematics and engineering.

Learning outcomes

At the end of the course, a successful student will be able to apply learned methods and techniques to the problems that arise in the practice, and to understand the basic theory of complex functions.

Syllabus

- Analytical functions, power series, conformal mapping;
- Complex integration, singularities, residues;
- Series of analytic functions, Taylor series, Laurent series;
- Application of residues to the calculation of integrals;
- Fourier and Laplace transforms.

Weekly teaching load				Other: 0
Lectures: 3	Exercises: 3	Other forms of teaching: 0	Student research: 0	