

Doctoral School in Mathematics and Computer Science

Doctoral supervisors

Mathematics Field of study

Prof. dr. Agratini Octavian

Operator Theory, Linear Approximation Processes, Quantum Calculus

Prof. dr. Andrica Dorin

Geometry, Critical Point Theory, Lie Groups, Geometric Mechanics

Prof. dr. Baricz Árpád

Orthogonal polynomials and special functions

Prof. dr. Breaz Simion-Sorin

Modules, Abelian Groups, Rings, Homological Algebra

Conf. dr. Breckner Brigitte-Erika

Topological Semigroups, Functional Analysis, Critical Point Theory, Analysis on Fractals

Conf. dr. Buică Florina-Adriana

Qualitative Theory of ODEs, Bifurcation Theory, Dynamical Systems

Prof. dr. Bulboacă Teodor

Complex Analysis, Geometric Function Theory

Conf. dr. Cătinaş Teodora-Maria

Approximation Theory, Numerical Methods

Prof. dr. Crivei Septimiu

Module theory, Category theory

Prof. dr. Groşan Teodor-Silviu

Theoretical Mechanics, Fluid Mechanics, Porous Media, Heat Transfer

Prof. dr. Kohr Mirela

Fluid Mechanics, Potential Theory, Complex Analysis, Partial Differential Equations

Prof. dr. Kristály Alexandru

Calculus of Variations, Critical Point Theory, Elliptic Problems, Riemann-Finsler Geometry, Geometric Analysis, Optimization on Manifolds

Conf. dr. Lisei Hannelore

Stochastic Analysis, Variational Calculus

Prof. dr. Mărcuş Andrei-Dorin

Representation Theory of Groups and Algebras

Conf. dr. Micula Sanda

Numerical methods for integral equations, Approximation methods for boundary value problems, Numerical solutions of fluid flow problems

Conf. dr. Modoi George-Ciprian

Abelian and Triangulated Categories, Homological Algebra

Prof. dr. Petruşel Adrian

Nonlinear Analysis, Differential Equations, Fixed Point Theory

Conf. dr. Pinteă Cornel

Geometry, Differential Topology, Algebraic Topology, Critical Points

Prof. dr. Popovici Nicolae

Vector Optimization, Operations Research, Convex Analysis, Generalized Convexity, Set-valued Analysis

Prof. dr. Precup Radu

Nonlinear Functional Analysis, Ordinary and Partial Differential Equations

Prof. dr. Sălăgean Grigore

Complex Analysis, Geometric Function Theory

Computer Science Field of study

Prof. dr. Andreica Anca-Mirela

Applied Computational Intelligence

Conf. dr. Chira Camelia

Metaheuristics, Computational Intelligence, Complex Systems

Prof. dr. Czibula Gabriela

Computational Intelligence, Machine Learning, Distributed Artificial Intelligence

Prof. dr. Czibula István-Gergely

Search Based Software Engineering

Prof. dr. Dioşan Laura-Silvia

Nature-inspired Computation, Machine Learning, Applied Computational Intelligence

Conf. dr. Motogna Simona

Software Engineering, Software Quality, Empirical methods in Software Engineering

Prof. dr. Pârv Bazil

Software Engineering, Modeling and Simulation, Scientific Computation

Prof. dr. Pop Horia F.

Computational Intelligence, Intelligent Data Analysis

Affiliated academic staff

Mathematics

Prof. dr. Breaz Valer-Daniel

Complex Analysis, Geometric Function Theory

Description

The Faculty of Mathematics and Computer Science from Babeş-Bolyai University offers 3rd cycle academic studies in the form of PhD programmes in Mathematics and Computer Science, organized by the Doctoral School of Mathematics and Computer Science. The degrees offered are PhD in Mathematics and PhD in Computer Science, respectively. Target groups are graduates of master programmes in Mathematics, Computer Science, Computer Engineering, Economics, and Natural Sciences. The main purpose of the programmes is to develop advanced research skills and to produce valuable and internationally visible scientific results in the fields of Mathematics and Computer Science. Our programmes are promoting high-quality fundamental and applied research in Mathematics and Computer Science, as well as interdisciplinary research, by involving the PhD students in the most important and recent research projects of the faculty, including international cooperation with academic and industrial partners.

The major research topics in Mathematics are: Algebra, Analysis, Geometry, Complex Analysis, Approximation, numerical and statistical calculus, Nonlinear operators and differential equations and Mechanics. In Computer Science, the research topics include: Applied computational intelligence, Machine Learning and applications, Search Based Software Engineering, Modeling and Simulation and Intelligent Data Analysis.

The mission of the Doctoral school in Mathematics and Computer Science is to allow PhD students to pursue high-quality research in Mathematics and Computer Science, as well as to continuously increase the scientific quality of mentoring doctoral students and the quality of their PhD theses. The main scientific objectives of the doctoral programmes in Mathematics and Computer Science include: (1) ensuring a high-quality educational process for PhD students; (2) scientific training of doctoral students at international standards; (3) promoting high-level scientific research, by stimulating doctoral students to disseminate their results in prestigious journals and volumes of relevant conferences in the field.

The Doctoral School supports joint doctoral degrees and allows the organization of a [European Doctorate](#) (Doctor Europaeus / Europaea), in order to stimulate the integration of doctoral graduates from the European Union in the European academic and socio-economic environment. The holder of a PhD diploma in Mathematics and Computer Science may activate in any academic or research institution, as well as in industrial or administrative fields.

Contact

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