Graduate Studies

- · Master's Program in Pure, Applied, and Financial Mathematics: This is a two-year MSc program consisting of 10-12 courses in the first year, followed by a research thesis project in the second year.
- · PhD Degree Program in Analysis, Algebra, Geometry, Graph Theory and Combinatorics, Numerical Analysis, Financial Mathematics, and Optimization:

This is a four-year doctoral program that includes at least 6 courses and a comprehensive examination in the first two years. The final two years are dedicated to a research thesis project, with the expectation that the results will be publishable in reputable international journals.

· Seamless Direct MSc-PhD Program in Pure and Applied Mathematics for Undergraduate Degree Holders:

This five-year program involves completing 10-13 courses and a comprehensive examination in the first two years. The remaining three years are focused on conducting research, with the expectation that the findings will be publishable in reputable international journals.



Department Facts



Since **1994**



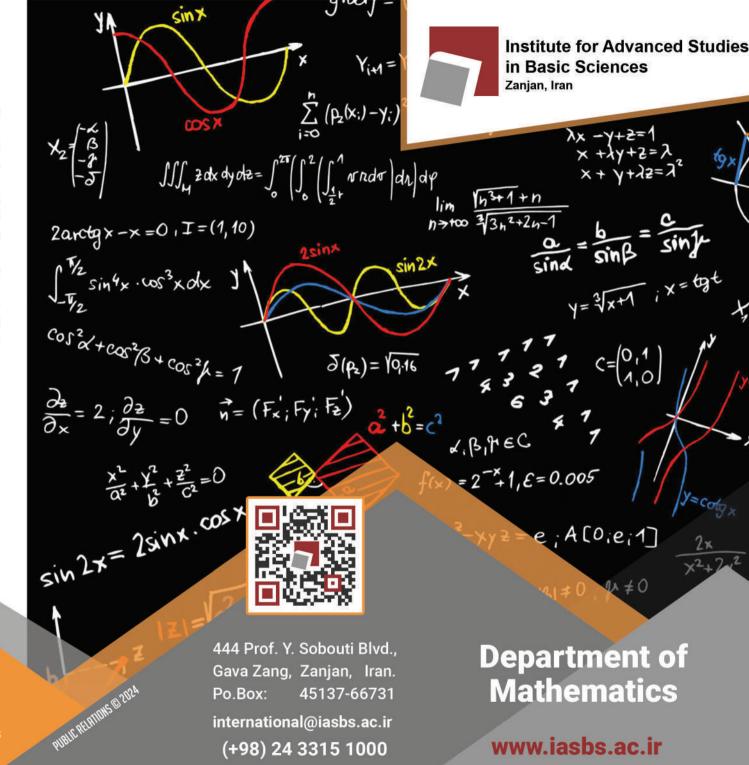
22 Faculty



719 Alumni



146 Students





The Department of Mathematics at the Institute for Advanced Studies in Basic Sciences (IASBS) in Zanjan was established in 1994, initially offering MSc degree courses in Pure and Applied Mathematics. The PhD program was introduced in 2004. The department is actively engaged in both education and research across pure, applied, and financial mathematics. The primary goal of the postgraduate programs is to train experts and researchers in the mathematical sciences who can conduct research at an international level. The mathematics faculty, who maintain a research-focused approach, work on cutting-edge topics in mathematics through both national and international collaborations.

Areas of Study

- Analysis (Operators Theory, Approximation Theory, Nonlinear Analysis and Optimization)
- · Algebra (Algebraic Geometry, Commutative Algebra and Group Theory)
- · Geometry (Differential Geometry and Mathematical Physics)
- · Graph Theory and Combinatorics (Algorithms and Combinatorics)
- Numerical Analysis (Numerical Linear Algebra, Differential Equations, Wavelet Theory)
- Financial Mathematics (Computational Finance, Systemic Risk and Stochastic Optimal Control)
- Optimization (Network Design and Dynamic Network Flows)
- · Cryptography and Code (Cryptography and Cryptanalysis)

Head of the Department:
Dr. Ali Akbar Yazdan Pour

Research Facilities

· Computational Laboratory:

The department has a computational laboratory dedicated to both education and research.

· Access to Additional Analytical Facilities:

Students and faculty have access to analytical facilities located in other departments within the Institute.

· General Support Facilities:

Students have access to various support facilities, including personal office space, a computer lab, web services, and meeting and conference rooms.

· Financial Support:

Financial assistance is available for students to attend domestic and international conferences and seminars.

Teaching and Research Assistantships:

Opportunities for teaching and research assistantships are provided to students.

