

Mathematics (English)			
Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6

## Program Information

Mathematical sciences are an important part of modern-day technological innovation and development. Mathematics drive the "knowledge economy," including machine learning, cyber security, biotechnology, design of new materials, computer games and individualised medicine. Mathematical sciences help us to understand the spread of influenza, earthquakes and avalanches, political upheavals and national economic fluctuations, and how neural networks solve image recognition problems.

The Department of Mathematics at Istinye University was founded to create the common language and the tools for the researchers and teachers in the Colleges of Medicine, Pharmacy, Engineering and Social Sciences. Istinye University researchers are particularly interested in computational methods for solving problems, and therefore, our mathematics department pays close attention to algorithms, algebra, graph theory, numerical solutions of ordinary and partial differential equations.

We have created a collaborative culture among the colleges, allowing the members of the Department of Mathematics to develop undergraduate courses working together with all researchers and teachers within the university.

The current members of the Department of Mathematics concentrate on algebra, number theory, finite fields and applications, error-correcting codes, cryptology, combinatorics, nonlinear dynamical systems, optimal control problems, and differential equations.