# CRYPTOGRAPHY

INSTITUTE OF APPLIED MATHEMATICS



### Why Study Cryptography?

Cryptography is an important component of information security, and plays an important role especially in cyber security. It encompasses mathematical techniques for providing confidentiality, integrity and authenticity of data during transmission and storage. As the information systems get connected and become accessible globally, protecting data susceptible to attacks of various kinds becomes more important.



## Importance of Cryptography

Cryptographic techniques which is one of the main tools in cyber security are crucial for the national security. Cryptographic expertise is required for verifying the security of cryptographic algorithms and protocols. All kinds of institutions dealing with sensitive data should be guarded against attacks. Hence there is a demand for highly skilled cryptographers.

### Suitable for Students from all Disciplines

Cryptography is a multidisciplinary program based on mathematics, computer science/engineering, electrical and electronics engineering, statistics and physics, which focuses on design, security analysis, and implementations of cryptographic algorithms.

### Job Opportunities & Projects

The graduates mainly work and take part in Turkish Armed Forces, TUBITAK, ULAKBIM, OSYM, Aselsan, Havelsan, universities, and software companies in the area of cyber security and information security.



- ▶ DPT Cryptographic Algorithm Design, Analysis and **Implementation**
- ► ASELSAN Projects:
- Selecting Secure Elliptic Curves over GF(p) and Implementing a Signature System Based on Elliptic Curves
- Developing Statistical and Structural Test Suite Software to Evaluate the Security of Block Ciphers
- ► TURKTRUST A.S. Security Tests for RSA Cryptosystem Parameters

## Admission Requirements and Application

For admission requirement please visit

https://iam.metu.edu.tr/en/application-and-admission

#### Contact

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