

# MAD-MATHEMATICS- DISCRETE

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## **MAD 2470 Introduction to Cryptography (3 Credits)**

This course equips students with the mathematical tools used to design and analyze cryptographic algorithms. Through exploration of a wide range of examples – from classic ciphers like Caesar to contemporary ones like DES and RSA – students gain a deep understanding of modern cryptographic principles. The course bridges theory and practice, delving into real-life applications like password authentication and online banking security. Students further enhance their skills by developing software and computer programming techniques for cryptographic implementation. By the end, they will possess a comprehensive understanding of how cryptography secures the digital world.

**Prerequisite:** C or higher in CET 2660, may also be taken as a corequisite