

NOC: Introduction to Cryptology - Video course

COURSE OUTLINE

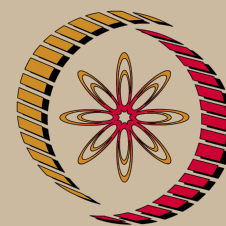
Cryptology is employed to communicate securely, authenticate messages and sign digitally. This four-week course "Introduction to Cryptology" is designed for both computer science and mathematics students, touching upon the most important ideas and techniques of the present day cryptology. All the pre-requisite topics are revised during the lectures making this course self-contained and accessible to a wider audience. It is hoped that this course will prepare interested students for a more extensive course on Information Security.

COURSE DETAIL

Week. No.	Topics
Week 1	Classical Cryptography, Shannon's Theory.
Week 2	Block Ciphers.
Week 3	Public Key Cryptography.
Week 4	Cryptographic Hash Functions.

References:

1. Stinson D., "Cryptography Theory and Practice", 3rd edition, Chapman & Hall / CRC
2. Das A. and Venimadhavan C. E., "Public-Key Cryptography-Theory and Practice", Pearson Education Inc
3. Koblitz N., "A Course in Number Theory and Cryptography", 2nd edition, Springer (Indian Reprint)
4. Buchman J., "Introduction to Cryptography", 2nd edition, Springer (Indian Reprint)



NP-TEL

NPTEL

<http://nptel.ac.in>

Computer
Science and
Engineering

Pre-requisites:

Discrete Mathematics

Coordinators:

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