

**ST.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**LESSON PLAN**

NAME OF THE SUBJECT: **Cryptography and Network Security**

SECTION: **IV CSE-B&IV CSE-C**

NAME OF THE INSTRUCTOR: **Mr.D.NageshBabu**

<b>S.No</b>	<b>Unit Number</b>	<b>Topics</b>	<b>No. Of Classes Required</b>
1	1	<b>Basic Principles</b> Security Goals, Cryptographic Attacks, Services and Mechanisms, Mathematics of Cryptography	8
2	2	<b>Symmetric Encryption</b> Mathematics of Symmetric Key Cryptography, Introduction to Modern Symmetric Key Ciphers, Data Encryption Standard, Advanced Encryption Standard.	10
3	3	<b>Asymmetric Encryption</b> Mathematics of Asymmetric Key Cryptography, Asymmetric Key Cryptography	9
4	4	<b>Data Integrity, Digital Signature Schemes &amp; Key Management</b> Message Integrity and Message Authentication, Cryptographic Hash Functions, DigitalSignature, Key Management.	10
5	5	<b>Network Security-I</b> Security at application layer: PGP and S/MIME, Security at the Transport Layer: SSL and TLS	7
6	6	<b>Network Security-II</b> Security at the Network Layer: IPSec, System Security	5

**TOTAL NO. OF CLASSES REQUIRED:49**

**TEXT BOOKS:**

- 1) Cryptography and Network Security, Behrouz A Forouzan, DebdeepMukhopadhyay, (3e) McGraw Hill.
- 2) Cryptography and Network Security, William Stallings, (6e) Pearson.
- 3) Everyday Cryptography, Keith M.Martin, Oxford.

**REFERENCE BOOKS:**

- 1) Network Security and Cryptography, Bernard Meneges, Cengage Learning.

**FACULTY**

**HOD**