



Course	<b>Cryptography and Network Security</b>	Year / Semester	IV / I
Topic	<b>Data Integrity, Digital Signature Schemes</b>	Innovative Method Chosen	<b>Learning by doing</b>

### Learning by doing

Data Integrity, Digital Signature Schemes, and Key Management are critical components in ensuring the security of digital communication and transactions. Message Integrity is closely related to these concepts and is essential for verifying that data has not been altered or tampered with during transmission. Let's break down each of these concepts:

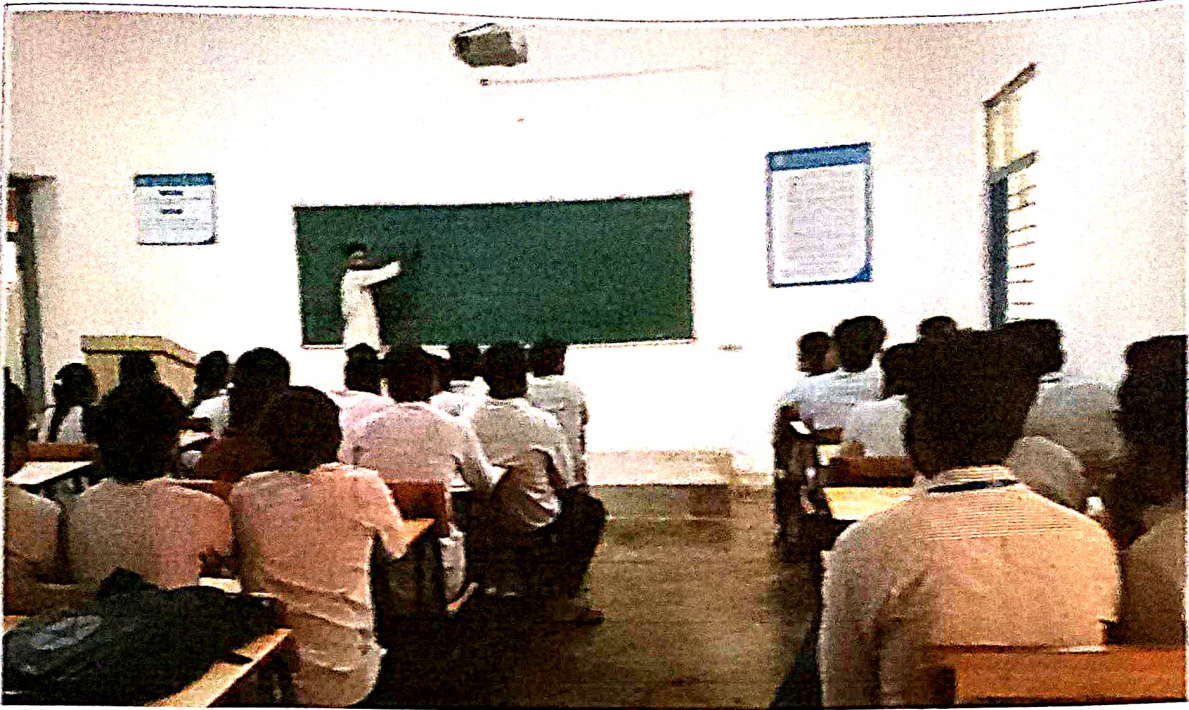
1. **Data Integrity:** Data integrity ensures that data remains unchanged and has not been corrupted or tampered with during storage, transmission, or processing. It guarantees the accuracy, consistency, and reliability of data over its entire lifecycle.
2. **Digital Signature Schemes:** Digital signatures provide a means of ensuring the authenticity, integrity, and non-repudiation of digital messages or documents. A digital signature scheme involves the use of cryptographic techniques to create a unique digital signature for a message or document. This signature is computed using the private key of the sender and can be verified using the sender's public key, providing assurance that the message was indeed sent by the claimed sender and has not been altered.

### Learning by doing:

Data Integrity, Digital Signature Schemes & Key Management Message Integrity is an important concept in the distributed shared memory. To identify the learning level of students about the distributed shared memory model this activity was given.

### Details of the Implementation:

- ↓ The topic was given one week before to the student Mr. G Nagendra and Anusha
- ↓ Required materials was sent to the students.
- ↓ The demo for the activity before the implementation of learning.
- ↓ Finally, he taught the topic as shown in the following figure.



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