

Course related to Professional Ethics

Sem.	Course Code	Non-Major Elective II: Information Security and Cyber Laws	Total Marks:75		Hours Per Week	Credits
			CIA :-	ESE :75		
IV	19UAKNT406				2	2

**OBJECTIVE:**

To enable the Students learn the basics of information security and gain the knowledge about all the aspects of Cyber laws and Cryptography.

**COURSE OUTCOMES:**

At the end of the course, the students will able to

- CO1: Understand the basics of Information Technology (Understand)
- CO2: Classify all types of crimes related to electronic records (Understand)
- CO3: Use authentication technology in case of digital signatures (Apply)
- CO4: Recognize Cyber laws and Security Policies and Cryptography (Remember)
- CO5: Identify the different sections in Information Technology Act, 2000 (Remember)

**UNIT- I**

Introduction–Computer: Evolution, Generation, Types, Major Components, Characteristics and Limitations-Information Technology.

**UNIT – II**

Cyber Space: Salient Features of Cyber Space – Netizen – Cyber Crime - Malware or malicious Computer Codes - Network and Network Security.

**UNIT – III**

Cryptography – Encryption Technique and Algorithm and Digital Signature – Electronic Signature.

**UNIT - IV**

Cyber Laws - Components of Cyber Law - Indian Position - Amendment of some conventional laws - Wider Interpretation of other conventional laws.

**UNIT – V**

Cyber Law in India: An overview of Information Technology Act 2000.

**TEXT BOOK:**

Dr. Jyoti Rattan - Cyber Laws & Information Technology-Sixth Edition, Bharat Law House Private Ltd., New Delhi, 2017.

**UNIT I:** Chapter 1: Section 1.1 – 1.3

**UNIT II:** Chapter 1: Section 1.4 – 1.5, Chapter 3, Chapter 4: Section 4.1- 4.2

**UNIT III:** Chapter 7

**UNIT IV:** Chapter 5: Section 5.1 – 5.3

**UNIT V:** Chapter 6

**REFERENCEBOOKS:**

1. Angur Shree Aggarwal, Sanjeev Kumar Sharma, Anuradha Tyagi, Shalu Goel- Information Security and Cyber Laws-First Edition, Vayu Education of India, New Delhi, 2011.
2. Richard E. Smith - Internet Cryptography – Pearson Education Private Ltd., 2013.
3. Neal Krawetz – Introduction to Network Security – Baba Barkha Nath Printers, New Delhi, 2007.
4. C K Shyamala, N. Harini, Dr T R Padmanabhan, Cryptography and Security-First Edition, Wiley India Private Ltd., New Delhi, 2011.
5. Atul Kahate- Cryptography and Network Security-Second Edition, Tata McGraw–Hill Publishing Company Limited, New Delhi, 2008.

<b>Question Paper Pattern</b>
<b>SECTION–A</b> <b>Five Questions</b> <b>(Either or Choice)</b> <b>Two Questions from each unit</b> <b>(5 x 15 = 75 Marks)</b>