

**SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMAKURU**  
**LECTURE PLAN FOR THE ACADEMIC YEAR 2023 – 2024**

<b>Teacher</b>	Dr. Kavitha H	<b>Dept.</b>	ISE
<b>Class</b>	7 Sem BE	<b>Course</b>	Cybercrime and Digital Forensics 7RIS02

**Course Objectives**

**The objectives of this course are:**

- 1 Provide comprehensive overview of cybercrime.
- 2 Understand crimes in mobile and wireless devices.
- 3 Investigate tools and methods used in cybercrime.
- 4 Understand computer forensics methodology.
- 5 Study examples and mini-cases in cybercrime.

Sl. No.	Date	Topic	Remarks
<b>UNIT I</b>			
1	04/10/23	<b>Introduction to Cybercrime:</b> Cybercrime: Definition and Origins of the Word	
2	05/10/23	Cybercrime and information security, who are Cybercriminals?	
3	06/10/23	Classifications of Cybercrimes, Cybercrime: The Legal Perspectives	
4	07/10/23	Cybercrimes: An Indian Perspective	
5	11/10/23	Cybercrime and the Indian ITA 2000	
6	12/10/23	A Global Perspective on Cybercrimes	
7	13/10/23	Cybercrime Era: Survival Mantra for the Netizens	
8	18/10/23	Cyberoffenses: How Criminals Plan Them? How Criminals Plan the Attacks.	
9	19/10/23	Social Engineering	
10	20/10/23	Cyberstalking, Cybercafé and Cybercrimes. Botnets: The Fuel for Cybercrime	
11	21/10/23	Attack Vector, cloud Computing	Assignment1
<b>UNIT II</b>			
12	25/10/23	<b>Cybercrime:</b> Mobile and Wireless Devices: Introduction	
13	26/10/23	Proliferation of Mobile and Wireless Devices	
14	27/10/23	Trends in Mobility, Credit Card frauds in Mobile and Wireless Computing Era	
15	28/10/23	Security Challenges Posed by Mobile Devices	
16	02/11/23	Registry Settings for Mobile Devices	
17	03/11/23	Authentication Service Security	



18	04/11/23	Attacks on Mobile/Cell Phones	
19	08/11/23	Mobile Devices: Security Implications for Organizations	
20	09/11/23	Organizational Measures for Handling Mobile	
21	10/11/23	Organizational Security Policies and Measures in Mobile Computing Era	
22	11/11/23	Organizational Security Policies and Measures in Laptops	Assignment2 16-18 Nov. Test1
<b>UNIT III</b>			
23	22/11/23	<b>Tools and Methods Used in Cybercrime:</b> Introduction, Proxy Servers and Anonymizers	
24	23/11/23	Phishing, Password Cracking	
25	24/11/23	Key loggers and Spywares	
26	25/11/23	Virus and Worms	
27	29/11/23	Trojan Horses and Backdoors	
28	24/11/23	Steganography, DoS and DDoS Attacks	
29	27/11/23	SQL Injection	
30	28/11/23	Buffer Overflow	
31	29/11/23	Attacks on Wireless Networks	
32	30/11/23	Phishing and Identity Theft: Introduction, Phishing, identity Theft (ID Theft)	Assignment3
<b>UNIT IV</b>			
33	01/12/23	<b>Understanding Computer Forensic:</b> Introduction, Historical of Cyber forensics, Digital Forensics Science	
34	02/12/23	The Need for Computer Forensics, Cyberforensics and Digital Evidence	
35	06/12/23	Forensics Analysis of E-Mail, Digital Forensics Life Cycle	
36	07/12/23	Chain of Custody Concept, Network Forensics	
37	08/12/23	Approaching a Computer Forensics Investigation, setting up a Computer Forensics Laboratory: Understanding the Requirements of Computer Forensics	
38	09/12/23	Forensics and Social Networking sites	
39	13/12/23	The Security/Privacy Threats, Computer Forensics from Compliance	
40	14/12/23	Perspective, Challenges in computer Forensics	
41	15/12/23	Special tools and Techniques in Forensics	
42	16/12/23	Forensics Auditing, Anti Forensics	Assignment4
<b>UNIT V</b>			
43	20/12/23	<b>Cybercrime:</b> Illustrations, Examples and Mini-Cases	
44	21/12/23	Introduction, Real-Life Examples	
45	22/12/23	Mini-Cases, Illustrations of Financial Frauds in Cyber Domain	
46	23/12/23	Mini-Cases, Illustrations of Financial Frauds in Cyber Domain	
47	27/12/23	Digital Signature-Related Crime Scenarios	
48	28/12/23	Digital Signature-Related Crime Scenarios	
49	29/12/23	Digital Forensics Case Illustrations	





Assessment Tools					
Direct AT	CO1	CO2	CO3	CO4	CO5
CIE (Individual)	√	√	√	√	√
SEE (Individual)	√	√	√	√	√
Assignments (Individual/Group)	√	√	√	√	√
Online courses (Individual)	√	√	√	√	√
Indirect AT					
Course end survey (Students)	√	√	√	√	√

**Course delivery methods, assessment tools and sample questions:**

<b>CO1</b>	<b>Describe</b> fundamental concepts of cybercrime and forensics.
<b>Delivery Methods</b>	Black Board Teaching, online resources
<b>Assessment Tools</b>	Quiz1, TEST 1, SEE, Assignment No. 1, Course end survey
<b>Sample Questions</b>	a) What is child pornography? Discuss the steps about how pedophiles operate. 8 (CO1,PO1,L2) b) Who are called as Netizens? Which are the 5P Netizen mantra? 4 (CO1,PO1,L2) c) Discuss about different ways of launching attack vectors. 8 (CO1,PO1,L2)
<b>CO2</b>	<b>Analyze</b> motive and causes for cybercrime, detection and handling.
<b>Delivery Methods</b>	Black Board Teaching, online resources
<b>Assessment Tools</b>	Quiz1, TEST 1, SEE, Assignment No. 2, Course end survey
<b>Sample Questions</b>	a) Explain in detail about two techniques of credit card frauds. 8 (CO2,PO2,L2) b) Differentiate between Key loggers and Spywares. 8 (CO2,PO2,L2) c) Brief about Bluetooth attacks. 4 (CO2,PO2,L1)
<b>CO3</b>	<b>Investigate</b> areas affected by cybercrime and investigation.
<b>Delivery Methods</b>	Black Board Teaching, online resources
<b>Assessment Tools</b>	Quiz2, TEST 2, SEE, Assignment No. 3, Course end survey

<b>Sample Questions</b>	a) List and explain different components of wireless network. 10 (CO3,PO3,L2) b) Which are the two techniques used for ID theft. Explain in detail. 10 (CO3,PO3,L2)
<b>CO4</b>	<b>Compare</b> various forensic tools and <b>apply</b> appropriate tools for cyber-forensic.
<b>Delivery Methods</b>	Black Board Teaching, NPTEL Videos, online resources, LCD projector
<b>Assessment Tools</b>	Real world case study, TEST 2, SEE, Assignment No. 4, Course end survey
<b>Sample Questions</b>	a) Discuss the need for Computer Forensics. 10 (CO4,PO2,L2) b) Explain in detail analysis of E-Mail. 10 (CO4,PO2,L2)
<b>CO5</b>	<b>Investigate</b> real world cases in the field of forensic.
<b>Delivery Methods</b>	Black Board Teaching, NPTEL Videos, online resources, LCD projector
<b>Assessment Tools</b>	SEE, Real world case study, Course end survey
<b>Sample Questions</b>	a) Discuss any Financial Fraud in Cyber Domain. 4 (CO5,PO2,L2) b) Explain any Digital Signature-Related Crime Scenario. 10 (CO5,PO2,L2) c) Explain any online scam. 6 (CO5,PO2,L2)

*K. K. K. K.*  
Teacher 3/10/23

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