

18CSPE703		CYBER FORENSICS		L	T	P	C
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Course Objectives:							
1.	To acquire the knowledge computer forensics						
2.	To familiarize the forensics tools						
3.	To analyze and validate forensics data						
4.	To gain the knowledge of ethical hacking techniques						
UNIT I INTRODUCTION TO COMPUTER FORENSICS							
				9	+	0	
Introduction to Traditional Computer Crime, Traditional problems associated with Computer Crime. Introduction to Identity Theft & Identity Fraud. Types of CF techniques - Incident and incident response methodology - Forensic duplication and investigation. Preparation for IR: Creating response tool kit and IR team. - Forensics Technology and Systems - Understanding Computer Investigation – Data Acquisition.							
UNIT II EVIDENCE COLLECTION AND FORENSICS TOOLS							
				9	+	0	
Processing Crime and Incident Scenes – Working with Windows and DOS Systems, Current Computer Forensics Tools - Software/ Hardware Tools.							
UNIT III ANALYSIS AND VALIDATION							
				9	+	0	
Validating Forensics Data – Data Hiding Techniques – Performing Remote Acquisition – Network Forensics – Email Investigations – Cell Phone and Mobile Devices Forensics.							
UNIT IV ETHICAL HACKING							
				9	+	0	
Introduction to Ethical Hacking - Foot-printing and Reconnaissance - Scanning Networks - Enumeration - System Hacking - Malware Threats – Sniffing.							
UNIT V ETHICAL HACKING IN WEB							
				9	+	0	
Social Engineering - Denial of Service - Session Hijacking - Hacking Web servers - Hacking Web Applications – SQL Injection - Hacking Wireless Networks - Hacking Mobile Platforms.							
Total (L)= 45 Periods							
Course Outcomes:							
At the end of the course students will be able to							
CO1	:	Acquire the basics of computer forensics					
CO2	:	Apply different computer forensic tools to a given scenario					
CO3	:	Analyze and validate forensics data					
CO4	:	Implement real-world hacking techniques to test system security					
Text Books:							
1.	Bill Nelson, Amelia Phillips, Frank Enfinger, Christopher Steuart, "Computer Forensics and Investigations", Cengage Learning, India Edition, 2016.						
2.	CEH official Certified Ethical Hacking Review Guide, Wiley India Edition, 2015.						

Reference Books:	
1.	John R.Vacca,"Computer Forensics", Cengage Learning, 2005
2.	Marjie T.Britz, "Computer Forensics and Cyber Crime": An Introduction", 3 rd Edition,Prentice Hall,2013.
3.	AnkitFadia "Ethical Hacking" Second Edition, Macmillan India Ltd, 2006.
4.	Kenneth C.Brancik "Insider Computer Fraud "Auerbach Publications Taylor & Francis Group-2008.