

21CSE24	COMPUTER FORENSICS	L	T	P	C
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<b>Course Objectives</b>					
<ul style="list-style-type: none"> <li>To correctly define and cite appropriate instances for the application of computer forensics correctly collect and analyze computer forensic evidence</li> <li>Identify the essential and up-to-date concepts, algorithms, protocols, tools, and methodology of Computer Forensics</li> </ul>					
<b>UNIT I</b>	<b>CYBER CRIME AND COMPUTER CRIME</b>	<b>9 Hours</b>			
Introduction to Digital Forensics, Definition and types of cybercrimes, electronic evidence and handling, electronic media, collection, searching and storage of electronic media, introduction to internet crimes, hacking and cracking, credit card and ATM frauds, web technology, cryptography, emerging digital crimes and modules.					
<b>UNIT II</b>	<b>BASICS OF COMPUTER</b>	<b>9 Hours</b>			
Computer organisation, components of computer- input and output devices, CPU, Memory hierarchy, types of memory, storage devices, system softwares, application softwares, basics of computer languages.					
<b>UNIT III</b>	<b>COMPUTER FORENSICS</b>	<b>9 Hours</b>			
Definition and Cardinal Rules, Data Acquisition and Authentication Process, Windows Systems-FAT12, FAT16, FAT32 and NTFS, UNIX file Systems, mac file systems, computer artifacts, Internet Artifacts, OS Artifacts and their forensic applications					
<b>UNIT IV</b>	<b>FORENSIC TOOLS</b>	<b>9 Hours</b>			
Introduction to Forensic Tools, Usage of Slack space, tools for Disk Imaging, Data Recovery, Vulnerability Assessment Tools, Encase and FTK tools, Anti Forensics and probable counters, retrieving information					
<b>UNIT V</b>	<b>PROCESSING OF ELECTRONIC EVIDENCE</b>	<b>9 Hours</b>			
Process of computer forensics and digital investigations, processing of digital evidence, digital images, damaged SIM and data recovery, multimedia evidence, retrieving deleted data: desktops, laptops and mobiles, retrieving data from slack space, renamed file, ghosting, compressed files.					
<b>UNIT VI</b>	<b>RECENT TRENDS</b>				
Recent Tools on Forensics					
<b>Course Outcomes:</b>					
At the end of the course, Students can able to					
<ul style="list-style-type: none"> <li>Know about various Cyber crimes and Computer crime</li> <li>Recall Computer basics</li> <li>Know about Computer Forensics and various tools available</li> </ul>					
<b>Text books:</b>					
1. C. Altheide& H. Carvey Digital Forensics with Open Source Tools, Syngress, 2011					
<b>Reference Books:</b>					
2. John R.Vacca, —Computer Forensics, Cengage Learning, 2005					
3. MarjieT.Britz, —Computer Forensics and Cyber Crime: An Introduction, 3rd Edition, Prentice Hall, 2013.					