

<b>III Year II Semester</b>	<b>CYBER CRIMES &amp; DIGITAL FORENSICS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
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### **Course Objective**

This course provides the student to know different crimes that are happening through the cyber world. The student can able to understand the digital forensic tools and different digital techniques in the cyber digital world

### **Unit -I**

**INTRODUCTION:** Introduction and Overview of Cyber Crime, Nature and Scope of Cyber Crime, Types of Cyber Crime: Social Engineering, Categories of Cyber Crime, Property Cyber Crime.

### **Unit -II**

**CYBER CRIME ISSUES:** Unauthorized Access to Computers, Computer Intrusions, White collar Crimes, Viruses and Malicious Code, Internet Hacking and Cracking, Virus Attacks, Pornography, Software Piracy, Intellectual Property, Mail Bombs, Exploitation, Stalking and Obscenity in Internet, Digital laws and legislation, Law Enforcement Roles and Responses.

### **Unit -III**

**INVESTIGATION:** Introduction to Cyber Crime Investigation, Investigation Tools, eDiscovery, Digital Evidence Collection, Evidence Preservation, E-Mail Investigation, E-Mail Tracking, IP Tracking, E-Mail Recovery, Hands on Case Studies. Encryption and Decryption Methods, Search and Seizure of Computers, Recovering Deleted Evidences, Password Cracking.

### **Unit -IV**

**DIGITAL FORENSICS:** Introduction to Digital Forensics, Forensic Software and Hardware, Analysis and Advanced Tools, Forensic Technology and Practices, Forensic Ballistics and Photography, Face, Iris and Fingerprint Recognition, Audio Video Analysis, Windows System Forensics, Linux System Forensics, Network Forensics.

### **Unit -V**

**LAWS AND ACTS:** Laws and Ethics, Digital Evidence Controls, Evidence Handling Procedures, Basics of Indian Evidence ACT IPC and Cr PC, Electronic Communication Privacy ACT, Legal Policies.

**REFERENCES:**

1. Nelson Phillips and Enfinger Steuart, “Computer Forensics and Investigations”, Cengage Learning, New Delhi, 2009.
2. Kevin Mandia, Chris Prosise, Matt Pepe, “Incident Response and Computer Forensics”, Tata McGraw -Hill, New Delhi, 2006.
3. Robert M Slade,” Software Forensics”, Tata McGraw - Hill, New Delhi, 2005.
4. Bernadette H Schell, Clemens Martin, “Cybercrime”, ABC – CLIO Inc, California, 2004.
5. “Understanding Forensics in IT”, NIIT Ltd, 2005.

**Textbook:**

1. Digital Forensics Basics: A Practical Guide Using Windows OS Paperback, 1<sup>st</sup> Edition, February 26, 2019