

ITOESCN	CYBER FORENSICS	L	T	P	C
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COURSE OBJECTIVES

- To study the fundamentals of Computer Forensics
- To learn, analyze and validate Forensics Data
- To study the tools and tactics associated with Cyber Forensics

Unit-I

Introduction: Computer Forensics Fundamentals – Types of Computer Forensics Technology – Types of Computer Forensics Systems – Vendor and Computer Forensics Services.

Unit-II

Computer forensics evidence and capture: Data Recovery – Evidence Collection and Data Seizure-Duplication and Preservation of Digital Evidence-Computer Image Verification and Authentication.

Unit-III

Computer forensic analysis: Discover of Electronic Evidence-Identification of Data – Reconstructing Past Events – Fighting against Macro Threats – Information Warfare Arsenal – Tactics of the Military – Tactics of Terrorist and Rogues – Tactics of Private Companies.

Unit-IV

Information warfare: Arsenal – Surveillance Tools – Hackers and Theft of Components – Contemporary Computer Crime-Identity Theft and Identity Fraud – Organized Crime & Terrorism – Avenues Prosecution and Government Efforts – Applying the First Amendment to Computer Related Crime-The Fourth Amendment and other Legal Issues.

Unit-V

Computer forensic cases: Developing Forensic Capabilities – Searching and Seizing Computer Related Evidence –Processing Evidence and Report Preparation – Future Issues.

TEXT BOOKS

1. John R. Vacca, “Computer Forensics: Computer Crime Scene Investigation”, Cengage Learning, 2nd Edition, 2005. (CHAPTERS 1 – 18). (UNIT I – IV)
2. Marjie T Britz, “Computer Forensics and Cyber Crime: An Introduction”, Pearson Education, 2nd Edition, 2008. (CHAPTERS 3 – 13). (UNIT IV – V)

REFERENCES

1. MariE-Helen Maras, “Computer Forensics: Cybercriminals, Laws, and Evidence”, Jones & Bartlett Learning; 2nd Edition, 2014.
2. Chad Steel, “Windows Forensics”, Wiley, 1st Edition, 2006.
3. Majid Yar, “Cybercrime and Society”, SAGE Publications Ltd, Hardcover, 2nd Edition, 2013.
4. Robert M Slade, “Software Forensics: Collecting Evidence from the Scene of a Digital Crime”, Tata McGraw Hill, Paperback, 1st Edition, 2004.

ITOESCN	E- COMMERCE	L	T	P	C
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COURSE OBJECTIVES

- To provide basic knowledge about the types of Electronic payment systems.
- To illustrate the concepts of various On-Demand Education and Software Agents

Unit-I

E-Commerce Infrastructure: E-Commerce framework – Media Convergence-Anatomy of E-Commerce Applications – Consumer and Organization Applications – Market forces influencing the I-way – Components of the I-way – Network Access Equipment – Distribution Networks – Issues – Internet Terminology – NSFNET – Research and Education network – Internet Governance.

Unit-II

E-Commerce and Web: Architecture frame work for E- Commerce-WWW as the architecture-Hypertext publishing – Technology and Security on Web – Consumer Oriented Applications – Mercantile Process Model – Mercantile Models from the perspective of Consumer and merchants.

Unit-III

Electronic Payment Systems and EDI: Types of Electronic payment systems – Digital token based system – Smart cards – Credit card based system – Risk factors – Designing Electronic payment systems. EDI – EDI Applications in business – Legal, Security and Privacy issues – Standardization in EDI – EDI software implementation – EDI envelope-VANs – Internet based EDI.

Unit-IV

Inter organizational E-Commerce and Marketing: Internal Information Systems – Macro forces and Internal Commerce-Work-flow automation – Customization – SCM – Corporate Digital Library: Dimensions, Making a business case, Types of Digital Documents – Advertising on Internet – Charting the online marketing process – Market Research.

Unit-V

On-Demand Education and Software Agents: Computer based Education and Training – Technological Components – Digital Copyrights and E-Commerce-History of software agents – Characteristics and Properties of Agents – Technology behind the Agents – Telescript Agent Language-SafE-Tcl – Software Agents in action – SGML.

TEXT BOOKS

1. Ravi Kalakota, Andrew B. Whinston, “Frontiers of Electronic Commerce”, Paperback – Addison-Wesley Publishing Company, 1996.
2. Kenneth C. Laudon, “E-Commerce: Business, Technology”, Society– 2016 Edition 10.

REFERENCES

1. Dave Chaffey, “E-Business and E-Commerce Management: Strategy, Implementation and Practice”, 2013.
2. Tharam Dillon, Elizabeth Chang, “E-Commerce: Fundamentals and Applications”, Wiley publication 2007.
3. David Whiteley, “E-Commerce: Strategy, Technologies and Applications”, Tata McHill 2001.