

SHRI VAISHNAV VIDHYAPEETH VISHVAVIDHYALAYA, INDORE SHRI VAISHNAV INSTITUTE OF FORENSIC SCIENCE GENERIC ELECTIVE UNDER GRADUATE

| COURSE CODE | CATEGO RY | COURSE NAME | TEACHING &EVALUATION SCHEME | | | | | | | | |
|----------------|--------------|-------------------------------|-------------------------------|------------------|-------------------------|-------------------------------|-------------------------|----|---|---------|---|
| | | | THEORY | | | PRACTICAL | | | | | |
| | | | END SEM University Exam | Two Term Exam | Teachers Assessment* | END SEM University Exam | Teachers Assessment* | LT | Р | CREDITS | |
| FSU102 | GE | Cyber Crimes Investigation | 60 | 20 | 20 | 00 | 00 | 3 | 0 | 0 | 3 |

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit; Th. - Theory *Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives: The course aims to provide the students with

- 1. Types of cyber crimes and virus & worms
- 2. Cyber pornography, hacking, stocking
- 3. Cyber crime investigation protocols
- 4. Cryptography and Steganography

Course Outcomes: After studying this course, the students will

- 1. Be able to understand types of viruses
- 2. Know different types of crime associated with cyber space
- 3. Be able to perform cryptography and Steganography

Unit I. Cyber Crime -I

Definition and types of computer crimes. Distinction between computer crimes and conventional crimes. Computer virus, and computer worm – Trojan horse, trap door, super zapping, logic bombs.

Unit II. Cyber Crime - II

Types of computer crimes – computer stalking, pornography, hacking, crimes related to intellectual property rights, computer terrorism, hate speech, private and national security in cyber space. An overview of hacking, spamming, phishing and stalking.

Chairperson Board of Studies Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Chairperson Faculty of Studies Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Controller of Examinations Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

Joint Registrar Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore



SHRI VAISHNAV VIDHYAPEETH VISHVAVIDHYALAYA, INDORE SHRI VAISHNAV INSTITUTE OF FORENSIC SCIENCE GENERIC ELECTIVE UNDER GRADUATE

Unit III. Cyber Forensic Investigation I

Seizure of suspected computer. Preparation required prior to seizure. Protocol to be taken at the scene. Extraction of information from the hard disk. Treatment of exhibits. Creating bitstream of the original media. Collection and seizure of magnetic media. Legal and privacy issues. data recovery.

Unit IV. Cyber Forensic Investigation II

Introduction to Cyber forensic, Cyber forensic steps (Identification, Seizure, Acquisition, Authentication, Presentation, Preservation),Computer forensic expert, Cyber forensic investigation process, The goal of the forensic investigation

Unit V. Encryption and Decryption Methods

Introduction to Cryptography, Symmetric and Asymmetric Key Cryptography, Private Key and Public Key, Hash algorithm, Steganography.

Suggested Readings

- Digital Evidence and Computer Crime, Third Edition Eoghan Casey. Published by Elsevier Inc. All rights reserved.
- 2. Digital Evidence and Computer Crime, 2nd ed. : Eoghan Casey
- 3. Computer Forensics: Principles and Practices : Linda Volonino, Reynaldo
- 4. Computer Forensic Investigating Data and Image files by Ec-council
- 5. Computer forensic Nathan Clarke
- Cybercrime Investigations A Comprehensive Resource for Everyone by John Bandler & Antonia

Chairperson Board of Studies Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Chairperson Faculty of Studies Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Controller of Examinations Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

Joint Registrar Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore