



**Faculty of Computer Studies (FoCS)
Sub Committee for Curriculum Development**

Format to submit syllabus

Course Name: Computer Forensic - Detection & Prevention of Frauds

(UG/PG): PG

Number of Credits: 2

Level: 4

Course Code: T3416

Learning Objective(s): Students will develop an understanding of various types of fraud schemes and subsequently will generate the strategies to prevent the frauds.

Pedagogy:

Lectures
Discussion
Case studies
Hands-on lab work

Course Content:

Sr.No.	Topic	Hours
1	Module 1 – Overview of Forensics Introduction to digital forensics Cyberspace and criminal behavior Traditional Problems Associated with computer crime Challenges for digital forensics	3
2	Module 2 – Computer Forensics Computer Forensic tools - Software and Hardware Computer Forensics Analysis and Validation Network Forensics Cell Phone and Mobile Device Forensic Cloud Forensics	4
3	Module 3 - Computer Fraud Presentation and Detections What is fraud Types of frauds (focus on corporate frauds) and their differences Fraud prevention and detection How can data analysis be used to detect fraud	5

4	Module 4 – Search and Seizure Before a search and seizure Entering a premises Securing the crime scene, Scene processing and locating evidence Chain of custody Legalities of an investigation	6
5	Module 5 - Identifying and collecting evidence Understanding digital evidence Where is it located? Imaging of devices Verifying the image Storage of evidence Analyzing live systems	6
6	Module 6 - Processing of Evidence and Report Preparation Examining the evidence Circumventing passwords Collecting internet traces Time lining and log file analysis Steganography	6
	Total	30

Books Recommended:

1. Essentials of Corporate Fraud – Tracy Coenen
2. Computer Forensics and Cyber Crime- Marjie T. Britz
3. Insider Computer Fraud – Kenneth C. Brancik
4. Cyber Security Operations Handbook – Detlev Hoppenrath
5. Digital Evidence and Computer Crime – Eoghan Casey

Suggested Evaluation Methods:

Lab based Evaluations
 Assignments
 Presentation

Parallel/Similar courses the existing curriculum:

S.No.	Name of the course	Institute where it was offered
<u>1</u>	-	-

Name of Member	Prof. Harshad Gune				
Designation	Dy. Director				
Org. / Inst.	SICSR				
Signature					

Name of the Expert:

Signature:

Date: