CYBER FORENSICS LAB

Course Code : CSC 521

Credit Unit : 01
Total Hours: 20

Course Objectives:
Cyber Security enables the stakeholders to use various range of tools, software and equipment's to enhance the knowledge in Information security and Cyber Forensics for the purpose of consulting and training.
- Understand key terms and concepts in cyber law, intellectual property and cyber-crimes, trademarks and domain theft.
- To understand important cyber security legal principles that need to be made as an integral component and part of the growth and further evolution of emerging technologies.

Program List :
1. How implement security and privacy concerns**: (2 Hours)**
2. Implement Mobile Forensics**: (2 Hours)**
3. Understanding Digital Forensics**: (2 Hours)**
4. Understanding Cell Site Analyzer**: (2 Hours)**
5. Use of Computer Forensic Investigation and Cyber Terrorism**: (2 Hours)**
6. Use of XG-1541 Base pfSense+ Security Gateway**: (2 Hours)**
7. Implementing System Security and System Monitoring**: (2 Hours)**
8. Implement Security Auditing**: (2 Hours)**
9. Design Information Security Virtual Lab: **(2 Hours)**
10. Highly scalable infrastructure to create Virtualized environnement for Virtual machine server consolidation and Creating and managing server profiles for target users: **(2 Hours)**

Course Outcomes :
Upon completion of this course, students will be able to:
- Describe and analyze the hardware, software, components of a network and the interrelations.
- Explain networking protocols and their hierarchical relationship hardware and software. Compare protocol models and select appropriate protocols for a particular design.
- Manage multiple operating systems, systems software, network services and security. Evaluate and compare systems software and emerging technologies.
- Develop solutions for networking and security problems, balancing business concerns, technical issues and security.

Examination Scheme:

IA			EE			
A	**PR**	**Practical Based Test**	**Major Experiment**	**Minor Experiment**	**LR**	**Viva**
5	10	15	35	15	10	10

Note: IA –Internal Assessment, EE- External Exam, A- Attendance PR- Performance, LR – Lab Record, V –Viva.

Text & References:
- David Cowen, Computer Forensics: A Beginners Guide, McGraw Hill Education.
- Bill Nelson, Amelia Phillips, Christopher Steuart, Guide to Computer Forensics and Investigations.

- Brian Carrier, File System Forensic Analysis, Pearson.
- Marjie T. Britz, Computer Forensics and Cyber Crime, Pearson
- Cyber Security Law by Pavan Duggal