

P23CSG22 - CYBER SECURITY

(Generic Elective - Common Paper for all PG Programmes in the II Semester)

Course Outcomes:

At the end of the course, the students will be able to

1. understand what is cyber security
2. secure their e-mail communications
3. have familiarity in following security guidelines
4. know the cyber security initiatives taken by the Government
5. know how to do online transactions in a secured way

Unit-1: Introduction to Cyber Space History of Internet - Cyber Crime - Information Security –data stealing -Computer Ethics and Security Policies -violence against women- cyber security for women- stalking - pornography- usage of social media and cyber security for women.

Unit-2: Email Security & Wi-Fi Security Guidelines to choose web browsers - Securing web browser - Antivirus - Email security - Guidelines for setting up a secure password - Two-steps authentication- Password – Manager - Wi-Fi Security – strategies to overcome E-mail threats- techniques of using public Wi-Fi –legal aspects regarding Email.

Unit-3: Social Media Security Guidelines for social media security - Tips and best practices for safer Social Networking - Basic Security for Windows - User Account Password - Smartphone Security guidelines: Introduction to mobile phones - Smartphone Security - Android Security - IOS Security

Unit-4: Cyber Security Initiatives in India - Importance of cyber security- making awareness - Counter Cyber Security Initiatives in India - Cyber Security Exercise - Cyber Security in curriculum - Cyber Security Assurance –case studies- government initiations to prevent cyber-crimes.

Unit-5: Online Banking, Credit Card and UPI Security Online Banking Security - Mobile Banking Security - Security of Debit and Credit Card – UPI - Micro ATM, e-wallet and POS Security - Security of Micro ATMs - e-wallet Security Guidelines - Security Guidelines for Point of Sales(POS).

References:

1. Introduction to Cyber Security -- <http://uou.ac.in/foundation-course>
2. Fundamentals of Information Security, Cyber Security Techniques <http://uou.ac.in/progdetail?pid=CEGCS-17>
3. Cyber Attacks and Counter Measures: User Perspective <http://uou.ac.in/progdetail?pid=CEGCS-17>

4. A Guide for Women in Cyber Security, 2021.
<https://cybersecurityguide.org/resources/women-in-cybersecurity/>
5. The 2017 Global Information Security Workforce Study: Women in Cybersecurity
www.isc2.org/-/media/Files/Research/ISC2-Women-in-Cybersecurity2017
6. An Cybersecurity Workforce Report, Women in Cyber Security, Young, Educated And Ready To Take Charge. <https://www.isc2.org/-/media/ISC2/Research/ISC2-Women-in-CybersecurityReport.ashx>
7. Jack Balkin, et al. eds., CYBERCRIME: Digital Cops in a Networked World (NYU Press 2007) (ISBN:0814799833)
8. SudhirNaib, The Information Technology Act, 2005: A Handbook, OUP, NewYork,2011