

GECS-01 Foundation of Cyber Security (FCS)

UNIT-1

Introduction to cyber space: History of internet: Internet Addresses, DNS, Internet Infrastructure, World Wide Web.

Introduction to Cyber-Crime: Classification of cyber-crime, Reasons for commission of cyber-crime s, MALWARE AND ITS TYPE: Adware, Spyware, Browser Hijacking Software, Virus, Worms, Trojan Horse, Scareware. KINDS OF CYBER CRIME: Cyber Stalking, Child Pornography, Forgery and Counterfeiting, Software Piracy and Crime related to IPRS, Cyber Terrorism, Phishing, Computer Vandalism, Computer Hacking, creating and distributing viruses over internet, Spamming, Cross Site Scripting, Online auction fraud, Cyber Squatting, logic bombs, Web Jacking, Internet Time Thefts, Denial of service attack, Salami attack , Data diddling, Email spoofing.

UNIT-2

Cyber Security Technique: Authentication, Encryption Digital Signatures Antivirus, Firewall, Steganography.

UNIT-3

Investigating Cyber-Crimes: Introduction to cyber forensic, Computer forensics, Why should we report cyber-crime?

UNIT-4

Some Recent Cyber Security Attacks: introduction, some recent cyber-crime incidents.

UNIT-5

Cyber Security Initiatives in India: introduction, counter cyber security initiatives in India.

UNIT-6

Guidelines for Secure Password, Two Step Verification and Using Free Antivirus: Generating secure password, Guideline for setting secure password, Using password manager, What is a password manager?, Why you should use it?, How does it work?, some popular password managers, enabling two-step verification, securing computer using free antivirus.

UNIT-7

Configuring Firewall on mac Computer: Turning on and configuring the mac os x firewall, Working with windows firewall in windows, Firewall in windows 7, Configuring windows firewall. How to start & use the windows firewall with advanced security, How to Access the Windows Firewall with Advanced Security, What Are The Inbound & Outbound Rules?, What Are The Connection Security Rules?, What Does the Windows Firewall with Advanced Security Monitor?

UNIT-8

Choosing Best Browser to Suit Your Requirements: Finding the best browser according to the users requirement.

UNIT-9

Guidelines for Safe Internet Browsing: Safe browsing, How do i know if a website is secure?, Tips for buying online, Clearing cache for browsers, Clearing cache for chrome browsers above version 10, clearing cache for chrome browsers from version 1 to 9, Clearing cache for safari for ios, iphone and ipad, Clearing cache for safari for mac os x, Clearing cache for safari for windows, Clearing cache for internet explorer 9, 10 and 11, Clearing cache for internet explorer 8, Clearing cache for firefox, Clearing cache for firefox 33, Clearing cache for opera, Clearing cache for ccleaner.

UNIT-10

Wireless Security: What is wireless lan?, Major issues with wlan, Secure wlan, wi-fi at home.

UNIT-11

Email and Social Media Security: Safe browsing guidelines for social networking sites, General tips on using social networking platforms safely, Posting personal details, Friends, followers and contacts, Status updates, Sharing online content, revealing your location, Sharing videos and photos, Instant chats, Joining and creating groups, events and communities, Email security tips.

UNIT-12

Smartphone Security: Introduction, Smartphone security guidelines, Purses, wallets, smartphones, platforms, setup and installation, Platforms and operating systems, Feature phones, Branded and locked smartphones, General setup, Installing and updating applications, Communicating securely(through voice and messages) with a smartphone, Secure voice communication, Sending messages securely, Storing information on your smartphone, Sending email from your smartphone, capturing media with your smartphone, Accessing the internet securely from your smartphone, Advanced smart phone security.