School of Computing Science and Engineering

Course Code : BSCS3004

Course Name: Introduction to Cyber Security

UNITI

Introduction to Cyber Security GALGOTIAS UNIVERSITY

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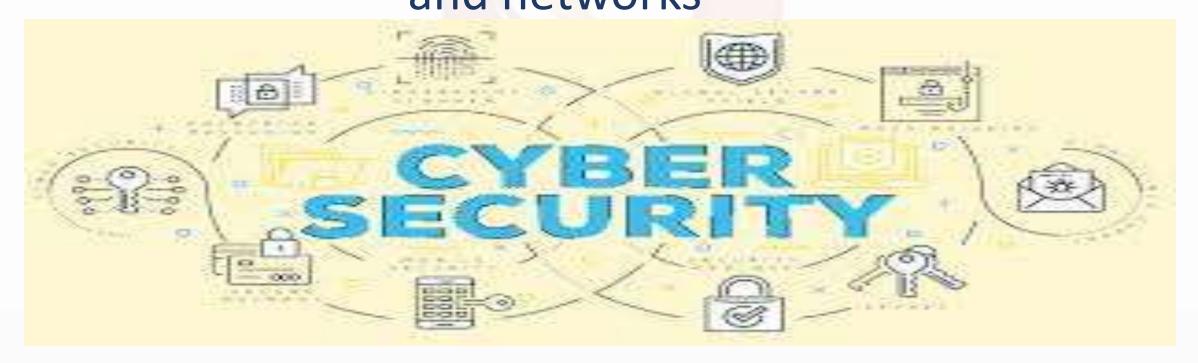
Program Name:

What is "cybersecurity? Cybersecurity:

" Information Security "

• Information security: The protection of information against unauthorized disclosure, transfer, modification, or destruction, whether accidental or intentional.

cybersecurity = security of cyberspace Cyberspace = Information systems and networks



cybersecurity = security of information systems and networks + with the goal of protecting operations and assets

cybersecurity = security of information systems and networks in the face of attacks, accidents and failures with the goal of protecting operations and assets

What is Cyber Security?

Cyber security consists of technologies, processes and controls designed to protect systems, networks, programs, devices and data from cyber attacks.

Vision

• To build a secure and resilient cyberspace for citizens, business, and government and also to protect anyone from intervening in your privacy.

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Mission

• To protect information and information infrastructure in cyberspace, build capabilities to prevent and respond to cyber threat, reduce vulnerabilities and minimize damage from cyber incidents through a combination of institutional structures, people, processes, technology, and cooperation.

Cybersecurity:

"The vulnerability of any computing system, software program, or critical infrastructure to, or by unauthorized of, the Internet, public or private means telecommunications systems or other similar conduct that violates Federal, State, or international law, or that threatens public health or safety."



cybersecurity: "information assurance, including scientific, technical, management, or any other relevant disciplines required to ensure computer and network security, including, but not limited to, a discipline related to the following functions:

(A) Secure System and network administration and operations.

(B) Systems security engineering.

(C) Information assurance systems and product acquisition.

(D) Cryptography.

(E) Threat and vulnerability assessment, including risk management.

(F) Web security.

(G) Operations of computer emergency response teams.

(H) Cybersecurity training, education, and management.

(I) Computer forensics.

(J) Defensive information operations.

According to S. 1900 "Cyberterrorism Preparedness Act of 2002 ":

cybersecurity: "information assurance, including information security, information technology disaster recovery, and information privacy."



Type of Cybersecurity:

Corporate cybersecurity = availability, integrity and secrecy of information systems and networks in the face of attacks, accidents and failures with the goal of protecting a corporation's operations and assets

National cybersecurity = availability, integrity and secrecy of the information systems and networks in the face of attacks, accidents and failures with the goal of protecting a nation's operations and assets



References:

- Cyber security: What You Need to Know About Computer and Cyber Security, Social Engineering, The Internet of Things + An Essential Guide to Ethical Hacking for Beginners Paperback – January 23, 2019
- Cybersecurity: An Essential Guide to Computer and Cyber Security for Beginners, Including Ethical Hacking, Risk Assessment, Social Engineering, Attack and Defense Strategies, and Cyberwarfare, Paperback – December 11, 2018, by <u>Lester</u> <u>Evans</u> (Author)

