# Glossary

# Cybersecurity



#### Terms and definitions from Course 1

#### A

Adversarial artificial intelligence: A technique that manipulates artificial intelligence (AI) and machine learning (ML) technology to conduct attacks more efficiently

**Antivirus software:** A software program used to prevent, detect, and eliminate malware and viruses

Asset: An item perceived as having value to an organization

Availability: The idea that data is accessible to those who are authorized to access it

B

**Business Email Compromise (BEC):** A type of phishing attack where a threat actor impersonates a known source to obtain financial advantage

### C

Cloud security: The process of ensuring that assets stored in the cloud are properly configured and access to those assets is limited to authorized users

Compliance: The process of adhering to internal standards and external regulations

Computer virus: Malicious code written to interfere with computer operations and cause damage to data and software

Confidentiality: Only authorized users can access specific assets or data

Confidentiality, integrity, availability (CIA) triad: A model that helps inform how organizations consider risk when setting up systems and security policies

**Cryptographic attack:** An attack that affects secure forms of communication between a sender and intended recipient

Cybersecurity (or security): The practice of ensuring confidentiality, integrity, and availability of information by protecting networks, devices, people, and data from unauthorized access or criminal exploitation

D

Database: An organized collection of information or data

Data point: A specific piece of information

Н

**Hacker:** Any person who uses computers to gain access to computer systems, networks, or data

Hacktivist: A person who uses hacking to achieve a political goal

**Health Insurance Portability and Accountability Act (HIPAA):** A U.S. federal law established to protect patients' health information

Integrity: The idea that the data is correct, authentic, and reliable

**Internal threat:** A current or former employee, external vendor, or trusted partner who poses a security risk

**Intrusion detection system (IDS):** An application that monitors system activity and alerts on possible intrusions

Linux: An open-source operating system

Log: A record of events that occur within an organization's systems

## M

Malware: Software designed to harm devices or networks

#### N

National Institute of Standards and Technology (NIST) Cyber Security Framework (CSF): A voluntary framework that consists of standards, guidelines, and best practices to manage cybersecurity risk

**Network protocol analyzer (packet sniffer):** A tool designed to capture and analyze data traffic within a network

**Network security:** The practice of keeping an organization's network infrastructure secure from unauthorized access



Open Web Application Security Project (OWASP): A non-profit organization focused on improving software security

**Order of volatility:** A sequence outlining the order of data that must be preserved from first to last

#### P

Password attack: An attempt to access password secured devices, systems, networks, or data

**Personally identifiable information (PII):** Any information used to infer an individual's identity

**Phishing:** The use of digital communications to trick people into revealing sensitive data or deploying malicious software

**Physical attack:** A security incident that affects not only digital but also physical environments where the incident is deployed

Physical social engineering: An attack in which a threat actor impersonates an employee, customer, or vendor to obtain unauthorized access to a physical location

**Privacy protection:** The act of safeguarding personal information from unauthorized use

**Programming:** A process that can be used to create a specific set of instructions for a computer to execute tasks

**Protected health information (PHI):** Information that relates to the past, present, or future physical or mental health or condition of an individual

**Protecting and preserving evidence:** The process of properly working with fragile and volatile digital evidence

# S

**Security architecture:** A type of security design composed of multiple components, such as tools and processes, that are used to protect an organization from risks and external threats

Security controls: Safeguards designed to reduce specific security risks

**Security ethics:** Guidelines for making appropriate decisions as a security professional

**Security frameworks:** Guidelines used for building plans to help mitigate risk and threats to data and privacy

**Security governance:** Practices that help support, define, and direct security efforts of an organization

Security information and event management (SIEM): An application that collects and analyzes log data to monitor critical activities in an organization

**Security posture:** An organization's ability to manage its defense of critical assets and data and react to change

Sensitive personally identifiable information (SPII): A specific type of PII that falls under stricter handling guidelines

**Social engineering:** A manipulation technique that exploits human error to gain private information, access, or valuables

**Social media phishing:** A type of attack where a threat actor collects detailed information about their target on social media sites before initiating the attack

**Spear phishing:** A malicious email attack targeting a specific user or group of users, appearing to originate from a trusted source

**SQL (Structured Query Language):** A programming language used to create, interact with, and request information from a database

**Supply-chain attack:** An attack that targets systems, applications, hardware, and/or software to locate a vulnerability where malware can be deployed

T

**Technical skills:** Skills that require knowledge of specific tools, procedures, and policies

Threat: Any circumstance or event that can negatively impact assets

Threat actor: Any person or group who presents a security risk

Transferable skills: Skills from other areas that can apply to different careers



**USB baiting:** An attack in which a threat actor strategically leaves a malware USB stick for an employee to find and install to unknowingly infect a network



Virus: refer to "computer virus"

**Vishing:** The exploitation of electronic voice communication to obtain sensitive information or to impersonate a known source



**Watering hole attack**: A type of attack when a threat actor compromises a website frequently visited by a specific group of users