

## Module 2

### What you'll learn

- Viruses
- Malware
- Social Engineering
- Digital age
- Security domains

### Key Terms

**Computer Virus** : Malicious code written to interfere with computer operation and cause damage to data and software

**Malware** : Software designed to harm devices or network

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

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

**Note :-** During the Equifax breach, over 143 million customer records were stolen and the breach affected approximately 40% of all Americans

## Common Attack

CSIRT = computer security incident and response team

- Phishing: Some major ones are
  - Business email compromise (
  - Spear for phishing (target specific user)
  - Whaling (Executive of company)
  - Vishing (electronic voice exploitation)
  - Smishing (use of text message)

## Malware: - Viruses

- Worms (duplicate and spread itself)
- Ransomware (ask payment to restore access after breaching)
- Spyware (gather and sell info without consent)

## Social Engineering

- social media phishing (collected data from social media)
- water hole attack (attack a website frequently visited by group of users)
- USB baiting: (strategically leave malware USB for employee to find and install)
- Physical social engineering (impersonate)



## CISSP Defines 8 domains

- 1 Security and Risk Management
- 2 Asset security
- 3 Security architecture and engineering
- 4 Communication and network security
- 5 Identify and access management
- 6 Security assessment and testing
- 7 Security operation
- 8 Software development security

Full form : Certified Information system security  
~~Professional~~ Professional

### Security and Risk Management :

Define security goals and objective  
risk mitigation, compliance, business continuity  
and the law

### Asset Security :

Secure digital and physical assets  
It also related to the storage, maintenance, retention  
and destruction of data

### Security architecture and Engineering

Optimizes data arch. security by  
ensuring effective tools, system and processors are in  
place



### Communication and network security:

Manage and secure physical network and wireless communication

### Identify and access management:

Keep data secure, by ensuring user follow established policies to control and manage physical assets like office space and logical assets such as network and application.

### Security assessment and testing

Conducting security control testing, collect and analyzing data and conducting security audits to monitor for risks, threat and vulnerability

### Security operation:

Conducting investigation and implementing preventative measures

### Software development security:

Uses secure coding practices which are a set of recommended guideline that are used to create secure applications and services