Foxford Learning Plan

YEAR 13

Topic Unit 1: Learning Aim B & C Data Transmission and Security Issues

Spring 1

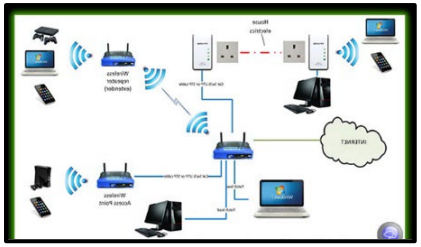
Key Vocabulary

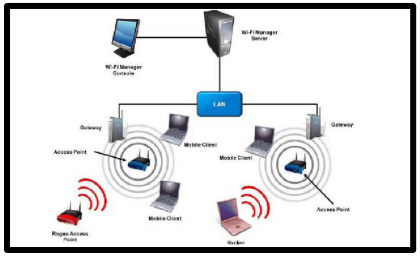
Network Connectivity	The extensive process of connecting various parts of a network to one another.
Bandwidth	The volume of information that can be sent over a connection in a measured amount of time – calculated in megabits per second (Mbps).
Latency	The time delay for a data packet to travel to its destination.
Transmitting data	It involves sending and receiving digital messages between devices.
Compression	This reduces the file size of the data whilst still retaining most of the original information.
Lossy Compression	It permanently deletes certain bits of data to reduce file sizes.
Lossless Compression	Every bit of data originally in a file remains after it is uncompressed, and all the information is restored.
Decompressing	The act of expanding a compression file back into its original form.
Security Issues	Unmitigated risk or vulnerability in your system that hackers can use to do damage to systems or data.
Firewalls	Software that enforces a set of rules about what data can enter and leave a network.
Encryption	Prevents data from being intercepted, is a process data is encoded to prevent unauthorised access.
File Permissions	Files and folders stored on your computer can have varying levels of permissions meaning you can decide which users can access each file or folder.
Downtime	When the network is unavailable.

Key Skills

Over the course of the topic, I will be able to: -

- Explain different types of network connections.
- Know what bandwidth is and the implication of latency.
- Explain the differences between lossy and lossless compression.
- Provide various security issues.
- Explain types of security issues.
- How to prevent network threats.
- Describe file permissions .
- Specify who and what can read, write, modify, and access file.





I will Understand

1. Types of connections.
2. How bandwidth works.
3. The differences between lossy and lossless compression.
4. The security issues related to network connections.
5. What network threats are.
6. How file permission works.
7. The effect of downtime.