

Summer Project
Year 1
Level 3



Your summer project part 1

The aim of this summer project is to enable you to understand how the components of computer systems work together. You will develop the skills needed to recommend appropriate hardware systems for various purposes.

Using the skills developed you will build/upgrade a full computer system with a view to testing and considering preventive maintenance procedures.

You are required to explain the functions of the main internal and external components of a computer system. To evidence this you will be producing a presentation. The list below is all of the internal and external components which need to be covered in your presentation.

internal system unit components


- o processors
- o motherboards
- o BIOS / UEFI
- o hard drive configuration and controllers (e.g. SATA, IDE, master, slave)
- o Thunderbolt
- o VGA, DVI, DisplayPort, HDMI
- o internal memory (e.g. RAM, ROM, cache)
- o specialised cards (e.g. network, graphics cards, sound).
- o power supply

peripheral devices

- o output devices (e.g. monitor, printer, speakers)
- o input devices (e.g. camera/webcam, scanner, microphone, mobile devices)

Part 2 summer project

Now you have completed your presentation you are required to outline different types of backup storage as identified in the list below. The evidence needs to be in a table format like the one below.

Name of storage	Picture	Security feature	Average capacity	Transfer rate	Main characteristics	Advantages of use	Disadvantages of use
Pen drive		Password protect and encrypt private files with SanDisk	32GB	35MB/s	Very small and portable	<ul style="list-style-type: none">• Large capacity• Cheap	<ul style="list-style-type: none">• Easy to misplace

Storage, i.e.:

- pen drives
- optical media
- flash memory cards
- cloud
- portable and fixed drives
- DASD
- SAS
- SSD
- enterprise storage
- NAS
- SAN
- hybrid systems
- virtual tape drives

Please submit electronically by Tuesday 25th August 2020 to Scott Marshall via email at Scott.Marshall@wnc.ac.uk