

INFO 1002 PC WORKSHOP

Credit Points 10

Legacy Code 300150

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Description This unit introduces students to the hardware and software components of a stand-alone personal computer (PC). Students become familiar with the CPU, memory, secondary storage, IO peripherals and communications devices commonly found in a PC. They learn to assemble and disassemble a PC and to install hardware and software components according to supplier specifications. Students also learn to use and customise the PC operating system to maintain and optimise PC performance.

School Computer, Data & Math Sciences

Discipline Information Technology, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 1 subject

Assumed Knowledge

Basic knowledge of personal computers.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Identify, locate, distinguish, and describe the individual hardware components of a PC and explain their purpose, functions and operations.
2. Explain and discuss the interaction between computer hardware components and devices and systems software.
3. List, explain and effectively use the major functions of a PC operating system to manage processes, programs, files, and devices.
4. Determine user requirements for new hardware components, devices and peripherals.
5. Explain technical specifications for PC hardware components, devices and peripherals and discuss these with suppliers and vendors.
6. Install PC components, devices and peripherals in accordance with installation procedures and operational standards with minimum disruption to clients.
7. Measure PC system performance and efficiency and tune and optimise components to meet operational requirements.
8. Use and extend the functionality of the PC operating system to monitor and manage the effective and secure operation of the PC and its devices.

Subject Content

PC architecture, CPU, Motherboard, bus, memory, disk systems, ports, monitor, video and sound cards, modems, pointers and joysticks. Basics of Windows operating system, file management, process management, device management, utility software. Technical specifications, manuals and standards, connectivity, portability, performance, capacity. Hardware suppliers, vendors, ordering procedures.

Device installation: Interrupts, DMA channels, IRQs, procedures, settings, switches, customisation, device conflict resolution.

PC Performance measurement and optimisation.

System files, Windows registry, RegEdit.

System recovery, rescue disks, backup and recovery procedures.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Completion of laboratory tasks.	Eight labs (practicals), three hours each.	20	N	Individual
Two Progressive mid-semester tests	2 hours each	30	N	Individual
One home assignment – Report & Case Study	One week to investigate and complete	10	N	Individual
Final Practical Demonstration	Two hours lab session	40	Y	Individual

Teaching Periods