



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

COMH6005: PC Maintenance

Module Details

Short Title:	PC Maintenance			APPROVED		
Full Title:	PC Maintenance					
Module Id:	2588					
Official Code:	COMH6005		NFQ Level:	6	ECTS Credits:	5
Coordinator:	JOSEPH CONNELL					
Description:	In this module students learn about personal computer hardware and operating system software. Practical experience will be gained in the maintenance and repair of both the computers hardware and its key software components.					
Learning Outcomes:						
On successful completion of this module the learner will be able to...						
1. Identify the main components in a personal computer 2. Describe the function of these components 3. Demonstrate how to remove and install these components 4. Be able to install and repair the computers operating system and remove both viruses and malware						
Pre-requisite learning						
Module Recommendations						
This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).						
No recommendations listed						
Incompatible Modules						
These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.						
No incompatible modules listed						
Module Requirements						
This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed. You may not enrol on this module if you have not acquired the learning specified in this section.						
No requirements listed						



Module Content & Assessment

Indicative Content

- **How a PC works**

Introduction to the main hardware components, the processor, memory, disk drives, motherboard, expansion cards, power supply, case, the display, peripheral interfaces such as USB, the operating system, the boot sequence.

- **Modern PC components**

a study of the most recent components and hardware standards.

- **Safety, Static and ESD**

discussion of the safety issues when working on electrical equipment, explanation of Electro Static Discharge, techniques to prevent ESD.

- **Installing and upgrading components**

practical work involving removing/installing the main components, i.e. RAM, CPU, hard disk drive, CD/DVD ROM drive, expansion cards

- **Installing the Operating System**

a discussion of modern operating systems, e.g. Windows XP, Linux, Windows Vista, installing operating systems, repairing faults

- **Troubleshooting**

Locating/Identifying hardware and software faults

- **Software Maintenance**

removing viruses, malware and Trojans. Checking for and correcting drive errors

Assessment Breakdown

	%
Course Work	100%
End of Semester Formal Examination	0%

Coursework Breakdown

Type	Description	Outcome addressed	% of total	Assessment Date
Multiple Choice Questions	examination of ability to identify and describe the function of the main PC components	1,2	20	Week 3
Practical/Skills Evaluation	assessment of practical work in lab	1,2,3,4	80	Every Week

The institute reserves the right to alter the nature and timings of assessment



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Module Workload & Resources

Workload		Full-time mode			
Type	Description	Hours	Frequency	Average Weekly Learner Workload	
Lab	Practical lab work, 2 x 2 hour labs	4	Every Week	4.00	
Independent & Directed Learning (Non-contact)	No Description	3	Every Week	3.00	
Total Weekly Learner Workload				7.00	
Total Weekly Contact Hours				4.00	

Workload		Part-time mode			
Type	Description	Hours	Frequency	Average Weekly Learner Workload	
Lab	1 x 3 hour lab	3	Every Week	3.00	
Independent & Directed Learning (Non-contact)	autonomous learning	4	Every Week	4.00	
Total Weekly Learner Workload				7.00	

Resources

Recommended Book Resources

- **Corey Sandler 2007, *Fix Your Own PC*, John Wiley & Sons [ISBN: ISBN-10: 0470107871, ISBN-13: 978-0470107874]**

Supplementary Book Resources

- **Robert Thompson, Barbara Fritchman Thompson 2007, *Building the Perfect PC*, O'Reilly [ISBN: ISBN-10: 0596526865, ISBN-13: 978-0596526863]**
- **Scott Mueller 2007, *Upgrading and Repairing PCs*, QUE [ISBN: ISBN-10: 0789736977, ISBN-13: 978-0789736970]**
- **Michael Meyers 2003, *Introduction to PC Hardware and Troubleshooting*, McGraw-Hill Osborne**
- **R Thompson 2006, *Repairing and Upgrading Your PC*, O'Reilly [ISBN: ISBN-10: 059600866X, ISBN-13: 978-0596008666]**

Other Resources

- **Website: Toms Hardware Page**
<http://tomshardware.co.uk/>
- **Website: Build your own PC**
<http://www.buildyourown.org.uk/>
- **Website: Komplet Ireland PC parts**
<http://www.komplett.ie>