MULTIMEDIA UNIVERSITY

SUMMARY OF INFORMATION ON EACH COURSE/MODULE

1.	Name of Course/Module/Subject	Introduction to Computing Technologies
2.	Course /Subject Code	PCT0101
3.	Status of Subject	Core
4.	MQF Level/Stage Note : *Certificate – MQF Level 3* *Diploma – MQF Level 4* *Bachelor – MQF Level 6* *Masters – MQF Level 7* *Doctoral – MQF Level 8*	Foundation
5.	Version (state the date of the last Senate approval)	December 2013
6.	Pre-Requisite/Requirement for Registration	NIL
7.	Name(s) of academic/teaching staff	Khairi Syazwan Bin Dollmat Timothy Yap Tzen Vun
8.	Semester and Year offered	Trimester 1
9.	Objective of the course/module/subject in the programme : To equip students with knowledge of computing technologies and ability to manipulate hardware and software components.	
10.	Justification for including the subject in the program : To provide students with general computing knowledge and computer assembly skills.	

11. Subject Learning Outcomes :

Subject Learning Outcomes :	Domain	Level
LO1: Identify suitable computing technologies to be used based on various applications	Cognitive	2
LO2: Assemble computer hardware and software components	Psychomotor	4

12. Mapping of Learning Outcomes to Programme Outcomes :

Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
LO1	X	X					X	
LO2	X	X						

13. Assessment Methods and Types :

Method and Type	Description/Details	Percentage
Presentations	Case studies during lab, class activities	60
Assignments	Written report	40

14. Details of Subject

Topics	Mode of Delivery (eg : Lecture, Tutorial, Workshop, Seminar, etc.) Indicate allocation of SLT (lecture, tutorial, lab) for each subtopic		
	Lecture (Hours)	Lab (Hours)	SLT (Hours)
1. Introduction to Computers The components of a computer. Computer software. Personal Computers. Mobile computers and mobile devices. Game consoles. Servers. Mainframes. Embedded Computers	2	2	4

	2. The Components of the System Unit Processor, Data presentation, Memory, Expansion slots and adapter cards. Parts and connectors. Buses. Bays. Power supply.	2	2	4
	3. Application Software Business software. Graphics and multimedia software. Software for home and personal use. Web applications.	2	2	4
	4. The Internet and World Wide Web Evolution of the Internet. The World Wide Web. E-Commerce. Internet services: e-mail, mailing lists, instant messaging, chat rooms, VoIP, newsgroups and message boards, ftp. Netiquette.	2	2	4
	5. Input and Output The keyboard. Mouse. Pointing devices: trackball, touchpad, pointing stick. Touch screens and touch-sensitive pads, Pen input. Game controllers. Input for smart phones, Voice input. Video input. Scanners and reading devices. Biometric input. Terminals. Display devices. Printers. Speakers. Headphones.	2	2	4
	6. Storage Hard disks. Flash memory storage. Cloud storage. Optical discs. Tape. Magnetic stripe cards and smart cards. Enterprise storage	2	2	4
	7. Operating Systems and Utility Programs Operating system functions. Stand-alone operating systems. Server operating systems. Embedded operating systems. Utility programs: file manager, search utility, disk cleanup, disk defragmenter, backup and restore utilities, personal firewall, antivirus programs, internet filters, media player, etc. Console commands.	2	2	4

	8. Communication and Networks Types of Data Networks. Network communication standards. Communication over the telephone network. Communication devices. Home networks. Physical transmission media. Wireless transmission media	2	2	4
	9. Database Management Databases, data and information. The hierarchy of data. Maintaining data. File processing vs Databases. Database management systems. Relational and object relational databases.	2	2	4
	10. Computer Security and Safety, Ethics and Privacy Internet and network attacks. Hardware theft. Software theft. Information theft. System failure. Wireless security. Health concerns of computer use. Ethics and society. Information privacy.	2	2	4
	11. Programming Languages and Program Development Low level languages. Procedural languages. Object-oriented programming languages. Program development tools. Web page development. The processes of program development.	2	2	4
	12. Enterprise Computing Information systems in the enterprise. Enterprise-wide technologies and methodologies: portals, data warehouses, intranet, web services, service-oriented architecture, etc. Virtualization and cloud computing. Enterprise hardware. High-availability, scalability and interoperability. Backup	4	4	8
	13. Computer Careers and Certification Careers in the computer industry. Preparing for a career in the computer industry. Certifications: Application software, operating system, programmer/developer, hardware, networking, security, etc.	2	2	4
		28	28	56

15.	Total Student Learning Time (SLT)	Face to Face	Total Guided and Independent Learning
	Lecture	28	56

	Tutorials		
	Laboratory/Practical	28	56
	Presentation		18
	Assignments		36
	Mid Term Test		
	Final Exam		
	Sub Total	56	166
	Total SLT	166	
16.	Credit Value	4 (166 / 40 = 4.15)	
17.	Reading Materials :		

Textbook	Reference Materials
Shelly, G. B., & Vermaat, M. E. (2011). Discovering computers 2011: Complete. USA: Course Technology.	Englander, I., (2009). The Architecture of Computer Hardware, Systems Software, & Networking: An Information Technology Approach (4th ed.). USA: Wiley. Parsons, J. J., & Oja, D. (2010). Computer concepts - illustrated introductory (7th ed.). USA: Cengage Learning.

18. Appendix (to be compiled when submitting the complete syllabus for the programme) :

1. Mission and Vision of the University and Faculty
2. Programme Objectives or Programme Educational Objectives
3. Programme Outcomes (POs)
4. Mapping of POs to the 8 MQF domain
5. Mapping of Los to the POs
6. Summary of the Bloom's Taxonomy's Domain Coverage in all the Los in the format below :

Subject	Learning Outcomes (please state the learning 0utcomes)	Bloom's Taxonomy Domain		
		Affective	Cognitive	Psychomotor
ABC1234	Learning Outcome 1			
	Learning Outcome 2			
	Learning Outcome 3			
	Learning Outcome 4			
DEF5678	Learning Outcome 1			
	Learning Outcome 2			
	Learning Outcome 3			
	Learning Outcome 4			

7. Summary of LO to PO measurement
8. Measurement and Tabulation of result for LO achievement
9. Measurement Tabulation of result for PO achievement

Mapping Learning Outcome to Assessment

No.	Assessment	LO1	LO2
A1	Presentations (100%)	X (100%)	
A2	Assignment (40%)		X (100%)