

Module Descriptor

Academic Session	2024/25
Module Title	Computing
MTC Module Code	MTCG1015
MTC Owning Department	Foundation Programme Department
MTC Module Coordinator	Rehana Anjum

Term Taught	1 & 2
Notional Hours	100
Scheduled Hours	55

Overview

This module covers the fundamentals of computing, and it introduces students to use computer applications for Word processing, Spreadsheets, PowerPoint presentations, Internet, and E-mail. The chapters in the module ensure that the students are equipped with the computing skills necessary to source, process and communicate information relevant to their higher education.

Notes/Accreditation Information

The contents of this module meet the requirements of OAAAQA GFP standards (5.2.1 to 5.2.6) and cover other Computing skills that facilitate learning in general.

Requisite Modules	
Module Title	MTC Code
English 2	MTCE1002

Aims (10 max)	
1.	To produce qualified students with good knowledge and skills in computing.
2.	To introduce the fundamentals of computing.
3.	To increase the student's confidence in using computing technologies.
4.	To equip the students with basics in e-learning applications.
5.	To develop students' skills to resolve problems by using IT applications.
6.	To equip the students with basic MS Office skills.

Learning Outcomes (Recommended 6) – On successful completion of this module, students should be able to:	
1.	Explain fundamentals of computing.
2.	Describe basic principles of operation of a personal computer system and file management.
3.	Explain fundamentals of computer networks, access information through the Internet and use electronic mails.
4.	Create word documents using different features and commands available in MS Word.
5.	Create presentations using different features and commands available in MS PowerPoint.
6.	Create and use spreadsheets for data processing using MS Excel.

Syllabus (10 max.) - The topics covered in the unit will include:
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1.	Computer Fundamentals: Introduction to computers. Basic applications of computers. Main functional blocks of a computer system. Differentiate data and Information. Computer hardware, Input devices, Output devices, CPU, CPU clock rate, Main memory (RAM, ROM), Secondary storage devices. Units for measuring memory. Computer ports. Compare and contrast different types of computers (Super computers, Mainframe computers, Minicomputers, Microcomputers). Different types of software (OS, Application software, Programming software). Install and uninstall software applications. Basic understanding of computer ergonomics. Software copyrights such as freeware and shareware. EULA. Omani data protection legislation, Minimum laptop computer configurations for student's usage.
2.	Basic Operations and File Management: Switching on and shutting down the computer. Using windows 8, Introduction to operating systems and application programs. Basic principles of file management (File explorer). Types of file extensions. Malware programs (Viruses, Worms and Trojan horses). Privacy issues and password. Backing up of data. Compress and decompress files and folders. Formatting storage media. Searching files and folders, Windows help and Support.
3.	Computer Networks and Internet: Introduction to computer networks, Advantages and risks associated with network computing. Types of computer networks (LAN, MAN, WAN). Intranet, Extranet, Internet. Brief history of Internet, Internet devices, Internet access technologies, Virtual Private Network, World Wide Web, Web browsers and browser settings (Bookmarks and Browsing history etc..), Web servers, HTML, HTTP, URL, Domain tree. Search engines. Downloading, Uploading, Electronic mail, Advantages of e-mail, Components of an e-mail message. E-mail address structure, Basic operations in e-mail (Read, Send, Forward, CC, BCC, Attachments). E-mail address list (Create, Add, Delete and Update). Manage Inbox (Sorting messages, Creating folders, and Finding messages), Sent items, deleted items and Junk E-mail folders, how e-mail works. Conferencing, VOIP, Instant messaging, Blogs, Using Virtual Learning Environment (Moodle), Things to be cautious about on internet, Risks to personal and organizational data, Phishing, Hacking, How to protect data, Secure web sites, Digital certificates, Encryption and decryption, Firewalls, Effects of IT on our lives and on Society.
4.	MS Word: Recognize, create and open word documents, Text level formatting, Paragraph level formatting, Document level formatting, Basic keyboard skills, Working with pictures, tables and charts, Convert word documents into PDF, Shortcut keys, Spelling and grammar checking, save, print and close word files.
5.	MS PowerPoint: Creating presentations, Working on slides, Inserting pictures, tables and SmartArt, Inserting animations, Applying transitions to the slides, Headers, Footers, Date and time, Slide numbers, Slide master, Duplicating and moving slides, Adding notes, Proofing tools (Spelling checking, Research, Thesaurus), Printing the presentation.
6.	MS Excel: Main components of an Excel sheet window, Basic uses of Excel, Creating spread sheets, Working on cells, Worksheets (Insert, Rename, Delete, Duplicate and move), Using formulas, Creating charts, Making changes to the chart, Sorting data, Linking cells, Visualized data, Printing sheets).

Learning and Teaching Strategy

The module will be delivered in one term through lectures, tutorials and practical exercises. The module adopts an integrated / a student-centered approach to learning & teaching . Students will be provided with comprehensive teaching/learning materials/workbooks and hands-on practice in

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the classroom. Students will undertake guided self-studies using VLE resources such as online tutorials, notes, interactive presentations and videos, etc.

Scheduled Activities (10 max.)						
#	Activity Type	QAA Activity	Description	No. of sessions	Duration	Hours
1.	Lecture	Lecture	5 hours per week	30	50 minutes	30
2.	Practical (computer)	Practical (computer)	5 hours per week	25	50 minutes	25

Assessment Strategy and Schedule

The module will be assessed through formative and summative assessments, namely: Continuous Assessment1(CA1), Continuous Assessment 2(CA2), and Final Exam (CA3, CA4 & CA5).

The Generic feedback on CA1 & CA2 will be provided to the students through Moodle/ Module Teacher. Generic feedback on the Final Exam will also be provided on Moodle.

This assessment plan will be implemented whether online or paper-based testing depending on the MTC Exams regulations.

The minimum passing mark is overall 50%.

Deferred First Attempt Assessment (DFAA): DFAA for Continuous Assessment 1 & 2, and Final exams will be a different set of exams but will cover the same Learning Outcomes of exam(s) missed. This deferred assessment will also have the same exam duration as the first attempt assessment.

Second Attempt Assessment (SAA/Re-sit): SAA will be **90 minutes** examination to cover **all Learning Outcomes**.

The maximum marks obtained by the students will be capped at 50% (minimum passing requirements).

Item	Assessment	Artefact Code	Weighting	Assessment Type	Final Artefact	Description
1.	CA1	CompA1	20%	Online Exam	N	30 Minutes
2.	CA2	CompA2	30%	Online Exam	N	45 Minutes
3.	Final Exam	CompA3	50%	Practical Skills Online Exam	Y	90 minutes
Indicative Reading						
	Title/Edition/Author			ISBN		
1	BASIC COMPUTER COURSE MADE SIMPLE (3 rd Ed, 2016), Author: Satish Jain Publisher: Bpb Publications			ISBN – 13: 9788183334594 ISBN – 10: 8183334598		



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2	Computing Essentials 2021 Author: Timothy J. O'Leary, Daniel O'Leary, Linda I. O'Leary Publisher: Mc Graw-Hill	ISBN – 9781260570755
3	MICROSOFT OFFICE INSIDE OUT: 2021 (Microsoft 365) EDITION Author: Microsoft Corporation, Ed Bott and Carl Siechert Publisher: Sebastopol, CA: O'Reilly Media, Inc., 2013	ISBN-10-0137564090 ISBN-13-978-0137564095
4	WINDOWS 11 FOR DUMMIES Author: Andy Rathbone Publisher: Hoboken, NJ: Wiley, 2021	ISBN-10– 1119846471 ISBN-13-978-1119846475
5	Fundamentals of Computer Science (1 st Edition August 2023), Author: Dr. Mahalingam Palaniandi and Dr. R. Selvam Publisher: VR1 Publications	ISBN : 978-93-91332-78-5