

MAKERERE UNIVERSITY
MAKERERE UNIVERSITY BUSINESS SCHOOL
FACULTY OF COMPUTING AND INFORMATICS
DEPARTMENT OF APPLIED COMPUTING & IT

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| COURSE UNIT | : FUNDAMENTALS OF INFORMATION COMMUNICATION TECHNOLOGY |
| SEMESTER | : II |
| ACADEMIC YEAR | : 2022/23 |
| LECTURERS | : Christine Nansamba, Charles Olupot, Francis Byabazaire, Winnie Kisakye, Hillary M Nagawa |
| CREDIT UNITS | : 4 |
| COURSE CODE | : BUC1112 |

COURSE OVERVIEW

ICT is a business process enabler that has modernized all the different sectors of the economy namely; finance, banking, accounting, humanities, human resource, Education, Health, Agriculture, tourism etc. As such, the knowledge and use of ICT has become an almost essential requirement in business or when someone wants to find employment. This makes it important for every student to learn at least the basic concepts of ICT that will give them the competence and confidence to use basic knowledge and skills acquired to assist them in their line of work. Apart from giving a general overview of ICT and its impact on society, this course also highlights the trend in technological advancements, basic operational knowledge on hardware/software. It builds a foundation of digital literacy skills that are necessary in a technologically driven society as well as emphasizing the role ICT can play in the achievement of Sustainable Development goals globally. This course also looks at the environmental, health and safety issues surrounding ICT in relation to the ever increasing use of computers at home, school and the workplace. The main objective of this course is to build an appreciation for the fundamental concepts in ICT and to become familiar with hands on practical applications, specifically MS Word and PowerPoint.

COURSE OBJECTIVES

This course will enable Learners to;

1. Acquire basic theoretical knowledge about key ICT concepts
2. Appreciate how integration of ICT can enhance progress for Sustainable development goals
3. Understand emerging technologies that businesses have to embrace if they want to continue reaching new heights.
4. Understand the moral standards, rules and regulations that should be followed by people using the internet
5. Acquire operational knowledge about computers as well as developing basic keyboard, word-processing and presentation skills

LEARNING OUTCOMES

By the end of this course, Learners will be able to;

1. Explain the key concepts of ICT
2. Explain how ICT can be used to achieve the SDGs
3. Discuss and make decisions on what emerging technologies they can apply in business/world of work
4. Use the internet in a productive and useful way that will make it a safe place for everyone or prevent damage/harm
5. Practically use computers competently for example use Microsoft word to generate professional documents for business and Ms PowerPoint for business presentations

COURSE CONTENT

| <u>WEEK (S)</u> | <u>TOPICS</u> | <u>PRACTICALS</u> |
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| 1 2, & 3 (12 HRS) | <p>1. Introduction to ICT and Key Concepts</p> <ul style="list-style-type: none"> ✓ Definition of ICT ✓ Role of ICT in business ✓ Strategic uses of ICT to gain competitive advantage ✓ Data and Information: Definition of Data, forms of data, Data Storage Units, Types of Data in business, Data Processing, Stages of Data Processing Cycle, Importance of Data Processing to a Business, Data Processing Methods, Data Processing Modes, Definition of Information, types of information in business, Relationship Between Data and Information, Comparison Between Data and Information, Qualities of Good Information (Time, Content and Form Dimensions) ✓ ICT for Sustainable Development Goals (ICT4SDGs): The role of ICTs in achieving Sustainable Development Goals (SDGS). | <p>Overview of computer operations and file management</p> <ul style="list-style-type: none"> • An overview of Microsoft Window Environment • How to start a PC. • Desktop items. • Start-up button and task bar. • Microsoft window (title bar, open, close, restore). • Hierarchical structure of drives, folders and files. • Folders/Files operation • Searching files. • Control panel. • Compressing files/folders and decompressing folders. • Keyboard Skills and typing Tutor <p>Overview of Keyboard navigation:</p> <ul style="list-style-type: none"> • New page (Ctrl+N) • Next page (Ctrl + Page Down) • Previous page (Ctrl + Page Up) • Start of Line (Home) • End of line (End) • Start of Document (Ctrl + Home) • End of Document (Ctrl + End) • Move insertion point (Left, Right, Up, Down arrows) • Page Down (Page Down) • Page Up (Page Up) • The Undo button (the magic button) |
| 4 & 5 (8 HRS) | <p>2 Digital Literacy & Digital Citizenship</p> <p>2.1 Digital Literacy</p> <ul style="list-style-type: none"> ✓ Definition of Digital Literacy ✓ Pillars of Digital Literacy ✓ Application of Digital Literacy skills ✓ Practical strategies for improving Digital Literacy ✓ Benefits of Digital Literacy to a business ✓ Limitations of Digital Literacy to a business | <p>Professional Document Production using Microsoft Word 2016</p> <ul style="list-style-type: none"> • An Overview of Word Environment • Document Formatting • Find and Replace • Changing measurements • Word computations (formulas) • Sorting, spelling and grammar • Mail Merge • Create a bibliography, citations, and references |

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| | <ul style="list-style-type: none"> ✓ Trends, issues and opportunities related to the use of digital opportunities in the work place <p>2.2 Digital Citizenship</p> <ul style="list-style-type: none"> ✓ Definition of Digital Citizenship ✓ Principles and elements of Digital Citizenship ✓ How to be a good Digital Citizen at the work place ✓ Importance of Digital Citizenship to a business ✓ Benefits of Digital Citizenship to a business | <ul style="list-style-type: none"> • Table of Contents, • List of Figures • List of Tables • Inserting Endnote and Footnote • Tracking Changes • Inserting Comments • Printing Documents |
| 5, 6 & 7 (12 HRS) | <p>3. Computer System</p> <ul style="list-style-type: none"> ✓ Definition of a Computer and its characteristics ✓ Understanding a Computer System ✓ Basic Applications of Computer Systems ✓ Components of a computer system ✓ Computer system configuration | <p>Practical Class Assignments</p> <ul style="list-style-type: none"> • Application letters • CVs • Invitations letters/Mail Merge • Memos/Mail Merge • Quotations • Certificates, Posters, invitation cards • Report formatting complete with; <ul style="list-style-type: none"> ○ Create a bibliography, citations, and references ○ Table of Contents, ○ List of Figures ○ List of Tables |
| | <p>4. Computer Hardware & Software</p> <p>4.1 Hardware</p> <ul style="list-style-type: none"> ✓ Definition of Computer Hardware ✓ Types of Computer Hardware with their components ✓ Computer Hardware Acquisition Methods ✓ Classification of Computers ✓ Computer Hardware Specifications ✓ Factors to Consider when purchasing Computer hardware ✓ Hardware Security <p>4.2 Software</p> <ul style="list-style-type: none"> ✓ Definition of computer software | |

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| | <ul style="list-style-type: none"> ✓ Software categories and functions ✓ Qualities of good software products ✓ Software business models ✓ Importance of Computer software to a business ✓ How to get software ✓ Factors to consider when choosing software for business ✓ Benefits of software to a business ✓ Software installation and maintenance | |
| <p>8 & 9</p> <p>(8 HRS)</p> | <p>Course Work Test I</p> | <p>Presentations using Microsoft power point 2016</p> <ul style="list-style-type: none"> • Create a presentation • Save a presentation • Open a presentation • Add, copy, rearrange, and delete slides • Hide or show a slide • Page Setup • View a slide show • Print a presentation • Themes • Spell Check • Inserting tables, images, charts etc • Slide Animation • Animation Preview • Editing Presentation Masters • Creating Multimedia Enriched Presentations <p>Review of other presentation applications i.e. Prezi, Powtoons, Google Slides, Camtasia, Slide Bean etc..</p> |
| <p>10 & 11</p> <p>(8 HRS)</p> | <p>5. Emerging Technology/ ICT Trends in business</p> <ul style="list-style-type: none"> ✓ Definition of Emerging Technology ✓ Characteristics of Emerging Technology ✓ Categories of Emerging Technology ✓ Role of Emerging Technology in business | <p>Online essentials for the workplace</p> <ul style="list-style-type: none"> ✓ Using a web browser ✓ Online information (how to find and manage information, searching, evaluation, copyright and data protection etc) ✓ Online safety ✓ Using online communication tools ✓ Using collaboration tools for the work place; <ul style="list-style-type: none"> ➤ Communication (Chat tools & Conference tools |

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| | | <ul style="list-style-type: none"> ➤ Documentation & file sharing (Google Doc, Google Drive, Drop Box) ➤ Time Management tools (Time Doctor, Toggle) ➤ Knowledge management (Guru, Confluence) ➤ Project collaboration (Trello, Jira) |
| 12 & 13 (8 HRS) | 6. The Internet <ul style="list-style-type: none"> ✓ Definition of the Internet ✓ Basic Internet terms ✓ How the Internet works ✓ Digital communication and collaboration tools ✓ Internet business opportunities ✓ Benefits of the Internet to a business ✓ Limitations of the internet for business ✓ Netiquette | |
| 14 (4 HRS) | 7. Issues in ICT <p>7.1 Health and safety issues</p> <ul style="list-style-type: none"> ✓ Understanding Health and Safety issues in the computing environment ✓ Negative impact of Health and safety issues ✓ How to minimize health and safety effects of ICT? <p>7.2 Environmental Issues</p> <ul style="list-style-type: none"> ✓ Understanding the environmental issues in ICT ✓ Positive and negative impact of ICT on the environment ✓ How to reduce the impact of ICT in the environment | |
| | Course Work Test II | |
| | Practical assignments | Group Assignment to be submitted through eLearning platform (mubsep.mubs.ac.ug) |
| 15 -17 | Examinations | |

TEACHING METHODS

Face to Face and Online lectures, class presentations, discussion and practical demonstration

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| ASSESSMENT: | Coursework (s) | 30% |
| | End of year examination | <u>70%</u> |
| | | 100% |

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STUDY TEXT

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