MAKERERE UNIVERSITY BUSINESS SCHOOL
FACULTY OF COMPUTING AND INFORMATICS
DEPARTMENT OF APPLIED COMPUTING & INFORMATION TECHNOLOGY
ACADEMIC YEAR 2023/2024 SEMESTER I
BACHELOR OF COMMERCE (BCOM)

COURSE NAME	: INTERMEDIARY ICT
COURSE CODE	: BUC 2122
YEAR OF STUDY	**:** II
SEMESTER	**:** I
CREDIT UNITS	: 4
FACILITATORS	**:** Christine Nansamba, Francis Byabazaire, Winnie Kisaakye, Seith Atuhurira

Course Description

Businesses and Organizations in the modern world are powered by Information Communication Technology. Given that the business environment is data-drive, this course has enriching concepts on how data is compiled and properly managed as well as its value in helping businesses meet their goals. As more and more businesses rely on networks and telecommunications to run their activities, it is important for you to understand exactly how this technology can improve business performance and provide value. Learning about Information Systems Methodologies gives you a competitive advantage because you'll be able to understand the various business processes and create a link between the users or customers and the technology. The inclusion of ecommerce plays to your advantage because it helps you grasp the basics and fundamentals of doing business online with the aim of making money. Students will learn about the social, legal and ethical issues pertaining to ICT as applied in business. ICT facilitates use of information available on the internet. but one should be cautious about the legal aspects such as copyright and intellectual property right. Social media technologies have also embedded in our daily lives. Technologies like smart televisions, laptops, smart phones, tablets, game consoles have become part of life of young people nowadays. With such emerging technologies, a number of ethical issues keep cropping up just like the legal and social issues. Due to rapid growth of internet, social media and Apps, one should be very careful how they conduct business online when using ICTs in order to combat the social, legal and ethical issues that crop up out of use. Lastly, having excel skills is extremely valuable to employers and can increase your chances of getting hired by showing employers that you have great analytical skills such as designing various business and financial models. That said, this course unit has been well packaged with rich content that helps a student to strategically position themselves in business while integrating ICTs.

Course Objectives

The aim of this course unit is to:

- Understand data management and its importance in organizations.
- Acquire knowledge of communication systems, networks technologies and the application they serve.
- Understand the steps involved in applying business/information technology (IT) solutions.
- Understand e-commerce, unique features of e-commerce technology and their business significance.

- Understand how ICTs are regulated, social and ethical issues in ICT as applied to a business.
- Equip learners with practical skills in developing various business and financial models using Ms Excel.

Learning Outcomes

At the end of the course, Learners should be able to:

- Apply data management techniques to ensure proper data management and regulatory compliance
- Identify the basic components, functions, and types of telecommunications networks, media and topologies applied in business.
- Demonstrate knowledge and skill set needed for the design and development of information systems.
- Be able to buy and sell various products/services over electronic systems such as the internet and other computer networks.
- Demonstrate professional practices that ensure high ethical and moral standards when using ICTs in business
- Demonstrate how ICT tools can be used socially to impact on a business.
- Develop various business and financial models using Ms excel.

DETAILED COURSE OUTLINE

THEORY

NO	TOPIC	CONTENT	WEEKS
1	**Data Management**	• Definition of Data Management • Data Management Principles • Data Management Process • Importance of Data Management • Data Management tools • Best practices/ Techniques for effective Data Management • Data Management challenges and possible solutions • Benefits of good Data Management • Consequences of poor Data Management	1-3
2	**Information Systems Development Methodologies**	• System development methodologies. • Advantages and Challenges of each Methodology. • Application of each methodology. • End user approaches to system development. • Activities involved in the implementation of new information systems.	4-6

3	**Networks and Telecommunication**	• Definition of a Network • Basic Network concepts • Uses of Networks • Benefits of Networks • Limitation of Networks • Classifications of Networks • Network design parameters • Network devices • Definition of telecommunication • Role of telecommunication • Data communications 1. Definition of data communications 2. Fundamental characteristics of data communications 3. Components of data communications 4. Data communications systems tasks 5. Data signals 6. Transmission methods 7. Transmission modes • Communication channels 1. Wire media 2. Wireless media • Protocols and standards • Network Security Best Practices	7-9
4	**E-Commerce**	• Definition of e-commerce. • Features of e-commerce • Ecommerce models/ Types of e-commerce • E-commerce Advantages and Disadvantages • E-commerce payment modes • E-commerce platforms • E-commerce revenue models • Identify several e-commerce applications. • Ecommerce business strategies • Ecommerce Challenges and solutions • Threats to e-commerce.	10-12
5	**Social, Legal & Ethical Issues in ICT and how they can be addressed**	• Social Issues of using technology in business 1. Understanding social issues 2. Social media (forms of social media, social media platforms, opportunities of using social media, threats of using social media) • Legal Issues 1. Cyber laws • Importance of cyber laws • Area of cyber laws • Major components of cyber laws	

		• Advantages of cyber laws • Challenges of implementing cyber laws in Uganda 2. ICT policies and issues • National ICT policy • Implementation of the ICT policy and strategy framework • Ethical Issues in managing technology in business • Personal privacy • Access right • Harmful actions • Patents • Copyright • Trade secrets • Liability • Piracy • plagiarism • Misuse of personal information 1. Misinformation and deep fakes 2. Lack of oversight and acceptance responsibility 3. Use of AI 4. Autonomous technology etc.	

PRACTICAL

NO	AREA	COVERAGE	WEEKS
1	**Introduction To Ms Excel Working Environment, Entering data and navigating a Workbook**	• Opening a workbook • Renaming, insertion, deletion and positioning of worksheets • Inserting and deleting of columns, rows, cells and cell addressing • Review of Excel Ribbon tabs-Home, Insert, Page layouts, formulas, data, review and View • Use of the Quick access toolbar • Use of the Office button • Saving of a workbook in a folder and compatible model • Auto fill, direct entry and importing data • Entering text and numerical data • Inserting columns and rows • Selecting Cells, Selecting Non adjacent cells, Auto select	1-2

		• Printer setup, Page setup, Setting of margins, headers and footers and print preview • Inserting comments • Number, Font, Alignment • Boarders and Fill • Protection • Copying, moving and pasting	
2	**Formatting and editing data in a Worksheet, & formulas**	• Entering Formula • Using Functions (Auto sum, average, count, • count if, max, min, and mode, median) Sorting in Ascending and descending order • Customized sorting • Subtotals for different columns with Summaries • Auto filtering and customized filtering • Cell referencing and fixing • Using the Chart wizard and formatting charts • Pivot Tables	3-5
3	**Logical functions**	• Introduction to the IF statement • Inbuilt and typed IF statements • Simple IF • Nested IF • General functions • Applications of the IF function-Grading, Tax (URA PAYE)	6-7
4	**Financial functions**	• Financial Modelling • PV, FV, NPV, IRR • Loan Amortization • Financial statements (Income statement, Balance sheet and Cash flow statements)	8-12

Delivery Method

Straight lecture, Discussion, practical and case studies **Assignments and Assessment**

Coursework assignments shall be timetabled and communicated accordingly. Students must attempt both of them.

Coursework	**Nature**	**Coverage**	**Grading**
1	Theory	Topics 1 & 2	15%
2	Practical	Ms. Excel	15%
Final Exam	Theory	All topics	70%
			100%

Each student must ensure that they receive their course work results before the final examination and raise any issues before the examination week commences. Ensure to receive and keep your coursework script until you receive the final examination results the following semester.

Learning Management System - Mubsep

Students are required to enroll themselves on the Makerere University Business School Education Portal - Mubsep (http://mubsep.mubs.ac.ug) BCOM II ICTB class. Mubsep is an online Moodle Online Learning Management System. All communication, teaching materials, assignments, results and discussion forum will be done on that forum.

Participation

Every student is required to attend at least 80% of the classes to fulfil the minimum requirements to sit for the final examination. Students are also required to attempt all assignments as partial fulfilment for the requirements of the course.

Statement for Academic Dishonesty

Academic dishonesty (e.g. cheating on assignments and examinations, plagiarism) is a serious offense. All work that you submit in this class must be your own. Each student is responsible for being familiar with the MUBS policies on academic dishonesty. Any student engaging in academic dishonesty in this course will receive a fail grade (0) and appropriate disciplinary action will be taken.

Resources

1. Aubrey James O'Brien (2010), *Management Information Systems, A Managerial End User Perspective*, McGraw-Hill Education, 10th Ed.
2. Avison, D. & Fitzgerald, G., (2006). *Information Systems Development: Methodologies, Techniques and Tools,* 4th Edition, McGraw-Hill, ISBN-13 978-0-07-711417-6
3. Internet resources such as Journals.
4. Kenneth C. Laudon & Jane P. Laudon (2006), *Management Information Systems,*
5. *Managing the Digital Firm.* Prentice Hall, 9th Ed.
6. Sonny Nyeko and Musa Moya (2013), ICT in Business Second Edition
7. Thomas Connolly and Carolyn Begg, (2014). *Database Systems, A practical approach to Design, Implementation, and Management*, Pearson, 6nd Edition.
8. Brey, P. A. (2010). Philosophy of technology after the empirical turn. *Techné: Research in Philosophy and Technology*, 14(1), 36-48.
9. Moor, J. H. (2008). Why we need better ethics for emerging technologies. *Ethics and Information Technology*, 7(3), 111-119.
10. Tavani, H. T. (2012). *Ethics and technology: Controversies, questions, and strategies for ethical computing* (4th edition.). John Wiley & Sons.