

# Career Base Information Technology (CBIT)

**Bachelor of Arts General Degree** (External)

# **Syllabus**

Centre for Distance and Continuing Education of the University of Kelaniya

www.cdce.kln.ac.lk

# **New Syllabus**

#### First Publish - 2022

The contents of this syllabus belong to the relevant academic Department and copyrights for the publication belong to the Centre for Distance and Continuing Education (CDCE). Coping of the above syllabus without permission of CDCE is strictly prohibited.

#### **Publisher**

Centre for Distance and Continuing Education University of Kelaniya Kelaniya

# **Information Technology**

Year	Semester	Course Code	Course Title	Compulsory /Optional	Credits
01	I & II	CBIT 18213	Fundamentals of ICT	Compulsory	3
02	III & IV	CBIT 28223	MS-Office Applications for Workplace	Compulsory	3
03	V & VI	CBIT 38233	Cloud Computing in Everyday Life	Compulsory	3

# First Year

# **CBIT 18213**

Course Code :- CBIT 18213

**Compulsory/Optional** :- Core

**Topic** :- Fundamentals of ICT

**Learning Outcomes** :-

At the completion of this course unit the student will be able to:

- ➤ Identify the basic components of a computer system.
- > Describe the role of computer hardware, computer software and their nature.
- ➤ Compare the performance of computers according to their hardware components.
- > Operate the computer system for various applications.
- Apply the networking concept for data and resource sharing.
- Use word processing applications effectively.
- Create high-quality document designs and layouts.
- Manage the computer towards sustainable and last longer performance.

#### Course Content :-

## **Information and Communication Technology**

ICT: Definition of ICT, Importance of ICT; Computer System: Computer Architecture, Representation of Data, Measurement Units; History of the Computer; Types of Computers; System Unit: Motherboard, Central Processing Unit (CPU); Computer Memories: Cache Memory, Random Access Memory (RAM), Read Only Memory (ROM); Input Devices; Output Devices; Storage Devices; Software: System software, Application software.

#### Managing a computer

Assembling a Computer, Installing an Operating System: Windows OS; Installing Application Software; Working on Windows OS: File System, Control Panel, Task Manager; Keyboarding.

## **Computer Networks**

Data Communications; Network Terminologies; Network Hardware; Classifications of Networks: LAN, WAN; Line Configuration; Network Topology; Transmission Media; Networks: Intranet, Extranet, Internet; IP Address and MAC Address; File and Resource Sharing through a Network.

#### **Word Processing**

Word Processing Applications; Microsoft Word (MS Word): MS Word Interface, Creating Word Documents, Adjusting Layouts, Inserting Text and Symbols, Formatting Text, Formatting Paragraphs, Working with Tables, Graphics and Charts, Page Design, Page setup, Mail Merge, Printing Documents.

# **Teaching/Learning Activities** :-

Lectures, Discussions, Assignments, Workshop
All should be presented by using LMS (As a PowerPoint presentation),
Using web search and self-studies methods.

# Assessment Strategy :-

Written exam (100 marks) or written exam (80 marks) + assignments (20 marks) at end of the academic year.

# **Recommended Readings** :-

- 01. Forouzan, B. A.(2013). *Data Communication and Networks* (5th ed.). USA: McGraw-Hill.
- 02. Leonhard, W. (2018). *Windows 10 All-in-One for Dummies* (3rd ed.). New jersey: Wiley.
- 03. Lambert, J., & Frye, C. (2015). *Microsoft Office 2016 Step by Step* (1st ed.). USA: Microsoft Press.
- 04. Peter, Norton. (2006). *Introduction to Computers* (6th ed.).India: Tata McGraw-Hill.
- 05. Tomsho, G. (2016). *Guide to Operating Systems* (5th ed.). USA: Cengage Learning.
- 06. Weverka, P. (2018). Office 2019 All-in-One For Dummies (1st ed.). New jersey: Wiley.

# **Second Year**

# **CBIT 28223**

Course Code :- CBIT 28223

**Compulsory/Optional** :- Core

**Topic** :- MS-Office Applications for

Workplace

# **Learning Outcomes**

At the completion of this course unit the student will be able to:

- Explore the Microsoft Office PowerPoint, Excel, and Access environment.
- Use Office Applications for workplace activities effectively.
- Design electronic presentations using suitable design layouts and animations.
- Organize data into a logical format through Spreadsheets.
- Formulate various spreadsheets formulas and functions to solve statistical problems.
- Apply database management concepts to address identified workplace issues.
- Manage databases through designing forms, manipulating queries, generating reports

#### **Course Content**

#### **Electronic Presentation**

Presentation Basics; Microsoft PowerPoint: MS PowerPoint Interface, Creating a Presentation, Formatting Presentations, Adding Tables, Using Charts, Adding Graphics, Using Animation and Multimedia, Delivering a Presentation, Printing Presentations.

:-

#### **Spreadsheet Management**

Microsoft Excel: MS Excel Interface, Basic File Operations, Working with Cells, Formatting Cells and Worksheets, Using Basic Formulas and Functions, Managing Worksheets, Working with Data and Macros, Advanced Formulas, Creating Charts, Securing and Sharing Workbooks, Printing Worksheets.

.

#### **Database Management**

Overview of Database Management; Microsoft Access: MS Access Interface, Basic File Operations, Creating and Modifying Database Tables, Creating Relationships, Creating and Modifying Queries, Designing Forms, Creating Reports, Displaying and Sharing Data, Import and Export Data, Printing Data.

# **Teaching/Learning Activities** :-

Lectures, Discussions, Assignments, Workshop

All should be presented by using LMS (As PowerPoint presentation), Using web search and self-studies methods.

# **Assessment Strategy** :-

Written exam (100 marks) or written exam (80 marks) + assignments (20 marks) at end of the academic year.

# Recommended Readings :-

- 01. 2019 Bible (1st ed.). New jersey: Wiley Alexander, M., & Kusleika, R. (2019). Access.
- 02. Alexander, M., & Kusleika, R. (2016). *Excel 2016 Formulas* (1st ed.). New jersey: Wiley.
- 03. Bluttman, K. (2018). Excel Formulas & Functions for Dummies (5th ed.). New jersey: Wiley.
- 04. Lambert, J. (2016). MOS 2016 Study Guide for Microsoft PowerPoint: MOS Study Guide (1st ed.). USA: Microsoft Press.
- 05. Pierce, J. (2016). MOS 2016 Study Guide for Microsoft Access (MOS Study Guide) (1st ed.). USA: Microsoft Press.
- 06. Walkenbach, J. (2015). *Excel 2016 Bible* (1st ed.). New jersey: Wiley.

# Third Year

# **CBIT 38233**

Course Code :- CBIT 38233

**Compulsory/Optional** :- Core

**Topic** :- Cloud Computing in Everyday

Life

# **Learning Outcomes** :

At the completion of this course unit the student will be able to:

- Describe the basic structure of the Internet.
- Identify the e-services run on the Internet.
- Describe the cloud computing concept.
- Identify cloud computing applications for various everyday needs.
- Use the e-services and suitable cloud computing applications for everyday life

### **Course Content**

## **Internet and Society**

History of the Internet, Structure of the Internet, Connecting to the Internet; Web Browsers, World Wide Web; Domain Name System; Website; Web 4.0; Search Engines; Internet and Society: E-Learning, E-Commerce, E-Government, E-Medicine.

:-

#### **Cloud Computing Services**

Cloud Computing; Cloud Deployment Models; Cloud Service Models; Cloud Computing Services: Storage Services, Information Collection Services, Mail Services, Social Media Services, Calendar Services, Video and Presentation Services, Office Application Services, Image Editing Services, Entertainment Services, Map Services.

# **Teaching/Learning Activities** :-

Lectures, Discussions, Assignments, Workshops
All should be presented by using LMS (As a PowerPoint presentation),
Using web search and self-studies methods.

# **Assessment Strategy** :-

Written exam (100 marks) or written exam (80 marks) + assignments (20 marks) at end of the academic year.

## **Recommended Readings** :-

- 01. Buyya, R., Broberg, J., & Goscinski, A. M. (2011). *Cloud Computing: Principles and Paradigms* (1st ed.). New jersey: Wiley.
- 02. Jackson, K., Bunch, C., & Sigler, E. (2015). *OpenStack Cloud Computing Cookbook* (3rd ed.). UK: Packt Publishing.

- 03. Peter, Norton. (2006). *Introduction to Computers* (6th ed.).India: Tata McGraw-Hill.
- 04 Rittinghouse, J. W. & Ransome, J. F. (2010). *Cloud Computing: Implementation, Management and Security*. USA: Taylor & Francis.
- 05. Sosinsky, B. (2010). *Cloud Computing Bible* (1st ed.). New jersey: Wiley.