

Introduction to ICT					
Credit Hours:	2	Course Code:	COSC-1105	Prerequisites:	none
Course Learning Outcomes (CLOs):					
At the end of the course the students will be able to:				Domain	BT Level
1. Understand basics of computing technology				C1 (Knowledge)	
2. Do number systems conversions and arithmetic				C2(Understand)	
3. Have knowledge of types of software				C2(Understand)	
4. Have knowledge of computing related technologies				C3 (Apply)	
* BT= Bloom’s Taxonomy, C=Cognitive domain, P=Psychomotor domain, A= Affective domain					
#	SDGs	Relevant CLOs			
1	SDG 4: Quality Education	CLO 3: Have knowledge of types of software CLO 4: Have knowledge of computing related technologies			
Course Contents:					
Brief history of Computer, Four Stages of History, Computer Elements, Processor, Memory, Hardware, Software, Application Software its uses and Limitations, System Software its Importance and its Types, Types of Computer (Super, Mainframe, Mini and Micro Computer), Introduction to CBIS (Computer Based Information System), Methods of Input and Processing, Class2. Organizing Computer Facility, Centralized Computing Facility, Distributed Computing Facility, Decentralized Computing Facility, Input Devices. Keyboard and its Types, Terminal (Dump, Smart, Intelligent), Dedicated Data Entry, SDA (Source Data Automation), Pointing Devices, Voice Input, Output Devices. Soft- Hard Copies, Monitors and its Types, Printers and its Types, Plotters, Computer Virus and its Forms, Storage Units, Primary and Secondary Memories, RAM and its Types, Cache, Hard Disks, Working of Hard Disk, Diskettes, RAID, Optical Disk Storages (DVD, CD ROM), Magnetic Types, Backup System, Data Communications, Data Communication Model, Data Transmission, Digital and Analog Transmission, Modems, Asynchronous and Synchronous Transmission, Simplex. Half Duplex, Full Duplex Transmission, Communications, Medias (Cables, Wireless), Protocols, Network Topologies (Star, Bus, Ring), LAN, LAN, Internet, A Brief History, Birthplace of ARPA Net, Web Link, Browser, Internet Services provider and Online Services Providers, Function and Features of Browser, Search Engines, Some Common Services available on Internet.					
Teaching Methodology:					
Lectures, Written Assignments, Practical labs, Semester Project, Presentations					
Course Assessment:					
Sessional Exam, Home Assignments, Quizzes, Project, Presentations, Final Exam					
Reference Material:					

1. Charles S. Parker, Understanding Computers: Today and Tomorrow, Course Technology, 25 Thomson Place, Boston, Massachusetts 02210, USA
2. Livesley, Robert Kenneth. An introduction to automatic digital computers. Cambridge University Press, 2017.
3. Zawacki-Richter, Olaf, and Colin Latchem. "Exploring four decades of research in Computers & Education." Computers & Education 122 (2018): 136-152.
4. Sinha, Pradeep K., and Priti Sinha. Computer fundamentals. BPB publications, 2010.
5. Goel, Anita. Computer fundamentals. Pearson Education India, 2010.

Introduction to ICT – Lab

Credit Hours:	1	Course Code:	COSC-1105	Prerequisites:	none
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Course Learning Outcomes (CLOs):

At the end of the course the students will be able to:	Domain	BT Level
1. Understand basics of computing technology	C1 (Knowledge)	
2. Do number systems conversions and arithmetic	C2(Understand)	
3. Have knowledge of types of software	C2(Understand)	
4. Have knowledge of computing related technologies	C3 (Apply)	

* BT= Bloom's Taxonomy, C=Cognitive domain, P=Psychomotor domain, A= Affective domain

#	SDGs	Relevant CLOs
1	SDG 4: Quality Education	CLO 3: Have knowledge of types of software CLO 4: Have knowledge of computing related technologies

Course Contents:

Basics of Windows Operating System, Desktop Items, Help and Supports about computer related queries, Creating, Deleting, Recovering from Recycle Bin, Renaming and moving File Folder, Searching file and folders in computer, Show and Hide file/folder, File Compression and Unzip, Internet Searching, Web Browser, Search Engine etc. Usage of MS Word application, Interface layout of MS Word, Title bar, Status bar, Ribbon, Group, Text Editing, Format Painter, Find and Replace, Insert and Overtyping Mode, Save file, Save as, Protect Document. Insert Mathematical Notation and Equation, Insert Symbol, Date and Time, Creating Hyperlink within file and Existing File or web link, Creating Macros, Water Marks, Insert Table, Delete Cell and row, column, Merge and Split cells, Table Borders Styles, Repeat title in table at each page, Text Orientation, Difference between Highlighter and Fill color. Track Changes, Comments, Line Numbering, Table of Contents, Table of Figures, List of Tables, References, Reference Table, Footnote, Mail Merge for Print and mail. Difference between Spread Sheet, Work Book and Work Sheet, Excel layout windows, Cell Address, Cell Reference and Cell Value, Edit Cell Value, Format Cell, Insert Basic Functions. Format Cells as Number, Text, Date and Time, Currency, Accounting, Percentage, Custom format, Auto Fill and Fill Series. Custom Formulas, Format Numbering, Date and Price Formatting, Adding Decimal Places, Built-in Functions, Sum, Product, Division, Today, Now, Count, Count-a, Max, Min, Average, If Else Function, Count-if Function, Average, if Function, Merge Cell, Data Validation. Introduction to PowerPoint, PowerPoint Layout, Slide, Object, Textbox, Insert Slide, Duplicate Slide, Slide Header & Footer, Slide Design and Layout, Delete Slide, Slide Show from First Slide, Slide Show from Current Slide, Extension of MS Office Products, Slide Notes, Slide Sorter. Introduction to MS Access Database, Record, Table, Add, Edit and Delete records within a table, Data Type and Properties available within Access

Teaching Methodology:
Lectures, Written Assignments, Practical labs, Semester Project, Presentations
Course Assessment:
Sessional Exam, Home Assignments, Quizzes, Project, Presentations, Final Exam
Reference Material:
1. Charles S. Parker, Understanding Computers: Today and Tomorrow, Course Technology, 25 Thomson Place, Boston, Massachusetts 02210, USA 2. Livesley, Robert Kenneth. An introduction to automatic digital computers. Cambridge University Press, 2017. 3. Zawacki-Richter, Olaf, and Colin Latchem. "Exploring four decades of research in Computers & Education." Computers & Education 122 (2018): 136-152. 4. Sinha, Pradeep K., and Priti Sinha. Computer fundamentals. BPB publications, 2010. 5. Goel, Anita. Computer fundamentals. Pearson Education India, 2010.