

Module (Course Syllabus) Catalogue 2024-2025

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| College/ Institute | Koya Technical Institute | |
| Department | Information Technology | |
| Module Name | Fundamental of Information Technology | |
| Module Code | ITF103 | |
| Degree | Technical Diploma <input checked="" type="checkbox"/> | Bachelor <input type="checkbox"/> |
| | High Diploma <input type="checkbox"/> | Master <input type="checkbox"/> PhD <input type="checkbox"/> |
| Semester | First Semester | |
| Qualification | PhD | |
| Scientific Title | Lecture | |
| ECTS (Credits) | 7 | |
| Module type | Prerequisite <input type="checkbox"/> | Core <input checked="" type="checkbox"/> Assist. <input type="checkbox"/> |
| Weekly hours | | |
| Weekly hours (Theory) | (2)hr Class | ()Total hrs Workload |
| Weekly hours (Practical) | (3)hr Class | ()Total hrs Workload |
| Number of Weeks | 12 | |
| Lecturer (Theory) | Dr. Syamnd Mirza Abdullah | |
| E-Mail & Mobile NO. | Syamnd.abdullah@epu.edu.iq +964 7711550154 | |
| Lecturer (Practical) | | |
| E-Mail & Mobile NO. | | |
| Websites | | |

Course Book

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| Course Description | Fundamental of Information Technology | | | | |
| Course objectives | <p>The Objective of Fundamental Computer prepares a student for basic knowledge using computer to solve data processing problems in daily life After completion of the course, students should be able to:</p> <p>1 – develop among students the programming techniques and the problem solving skills through programming.</p> <p>2 – show an awareness of what the major computer components are and how they act as system.</p> <p>3 - demonstrate a knowledge and understanding of using computers to solve problems related to practical applications.</p> <p>4 - use computer applications software to solve problems</p> | | | | |
| Student's obligation | <p>1 - deal with in a certain way all students with love and emotion</p> <p>2 - respects the value of being just and honest to all students irrespective of their caste.</p> <p>3 - Attendance is an essential requirement for all students even if in class or exam. for example, if students missed the exam without any authorized letter from Dean or Ass. Dean and Head of department will be loss the mark for exam, otherwise will be repeated the exam in appropriate time.</p> | | | | |
| Required Learning Materials | | | | | |
| Evaluation | Task | Weight (Marks) | Due Week | Relevant Learning Outcome | |
| | Paper Review | | | | |
| | Assignments | Homework | 5% | | |
| | | Class Activity | 2% | | |
| | | Report | 10% | | |
| Seminar | | 10% | | | |

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| | Essay | | | |
| | Project | | | |
| | Quiz | 8% | | |
| | Lab. | | | |
| | Midterm Exam | 25% | | |
| | Final Exam | 40% | | |
| | Total | | | |

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| Specific learning outcome: | <ol style="list-style-type: none"> 1. be able to define and appropriately use information technology terms; 2. be able to identify computer hardware components and describe their function; 3. be able to describe the essential elements of the computer's architecture and discuss how this architecture functions; 4. be able to describe the characteristics and representations of data, and interpret and compare data in different representations; 5. be able to identify and describe telecommunication components; 6. be able to describe the characteristics of operating systems and compare different operating systems; 7. be able to discuss the general trends in technologies including examples of leading-edge developments; <p>be able to compare the roles of different sectors of the information technology industry</p> |
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| Course References: | <p>Key references:</p> <ul style="list-style-type: none"> • Mathews Leon, Introduction to Information Technology, 2013. • Magazines and review (internet): <p>Computer Fundamentals Tutorial (Lecturer provides it in pdf).</p> |
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| Course topics (Theory) | Week | Learning Outcome |
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| Basic concepts in information technology and Equipment | 1 | Computer System, Information Technology, Type of Computer, Parts of computer, The Central Processing Unit, Input Devices, Output, Input/output Devices, Kind of memory, Forms of Primary Memory, Power Cuts, Data Representation in the Memory, Memory Chips, Secondary Storage, Storage Devices, Stored Date |
| Memory, storage and Performance | 2 | Computer Performance, Computer Software, Interface, System Development, Multimedia, Computers at work, Computers and people, Computer Use, Computer Applications in Business, Computer Applications in Governmental, Institutions, Computer in Hospitals, Computer in Education, Tele working, E-commerce, Understanding Software |
| Introduction to software | | Introduction to Operating System (O.S), Introduction to Windows 10, Starting windows, turning off your computer, using mouse, Desktop, Task Bar, Start Menu, |

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| | 3 | Change the start menu style, operating a program, Minimize, Maximize, close, switching between Running, moving windows, Resizing Windows, my documents, My Recent Documents, Remove My Documents Items, My Pictures & My Music, Control Panel, Control panel Views, Screen saver, Changing the Look of Windows Elements, Changing the Look of Windows Elements, Screen Colors Settings, Regional Settings, Set, Change Keyboard Language, Volume, Assigning Sounds to system Events, Reversing Your Mouse Buttons, Adjusting the Double Click Speed, Pointers Speed, Adding / Removing Programs, Recycle Bin, Start, shut down, Folders, Files, Renaming and Drives, My computer, Part of Windows and Copy File and Folder |
| MS Word Basics | 4 | Introduction to MS Word 2016, Getting Started Word 2016, Explore Window in Word 2016, Backstage View in Word 2016, Entering Text - Microsoft Word 2016, How to Switch the Language to English or Arabic, Move Around in Word 2016, Save Document in Word 2016, Open Document in Word 2016, Close Document in Word 2016, Insert Text in Word 2016, Select Text in Word 2016, Delete Text in Word 2016, Move Text in Word 2016, Copy, Cut & Paste in Word 2016, Find & Replace in Word 2016, Spell and Grammar Check in Word 2016, Zoom In and Zoom Out in Word 2016, Special Symbols in Word 2016 and Undo and Redo the Changes in Word 2016 |
| Formatting Text, Formatting Pages | 5 | Setting Text Fonts and Size in Word 2016, Text Decoration in Word 2016, Change Text Cases in Word 2016, Change Text Colors in Word 2016, Text Alignments in Word 2016, Indent Paragraphs in Word 2016, Create Bullets & Numbering in Word 2016, Set Line Spacing in Word 2016, Borders and Shades in Word 2016, Copy and Apply Formatting in Word 2016, Adjust Page Margins in Word 2016, Add Header and Footer in Word 2016, Add Page Numbers in Word 2016, Insert Page Breaks in Word 2016, Insert Blank Pages in Word 2016, Cover Pages in Word 2016, Page Orientation in Word 2016 |
| Working With Tables and Advanced Operations | 6 | Create a Table in Word 2016, Rows & Columns in Word 2016, Move a Table in Word 2016, Resize a Table in Word 2016, Merging Table Cells in Word 2016, Split a Table in Word 2016, Split a Table Cells in Word 2016, Add Formula to a Table in Word 2016, Table Borders & Shades, Quick Styles, Use Templates, Use Graphics in Word 2016, Auto Correction in Word 2016, Auto Formatting in Word 2016, Create Table of |

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| | | Contents in Word 2016, Preview Documents in Word 2016, Printing Documents in Word 2016, Email Documents using Word 2016, Translate Word 2016 Document, Compare Documents in Word 2016, Document Security in Word 2016 and Set Watermark in Word 2016 |
| Microsoft Excel 2016 | 7-8-9 | This section will explain what a Spreadsheet is and how it is benefited, explain how many ways to open a spreadsheet application, this section gives an overview of the Excel screen elements, Define workbook and consists, Explain rows and columns, Explain move in a worksheet, Create a new spreadsheet based on default template, In this section, the file will first be saved as a workbook document, Save a spreadsheet to a location on a drive, Save a spreadsheet as another file type like: template, text file, software specific file extension, version number, Switch between open spreadsheets, Understand that a cell should contain only one element of data, Enter text in a cell, Select a cell, rang of adjacent cells, Select a range of non-adjacent cells, Select an entire worksheet, Edit cell content, modify existing cell content, Use the undo, redo command, Use the search command for specific, Use the replace command for specific content in a worksheet, Use the replace command for specific content in a worksheet, Sort a cell range by one criterion in ascending, descending numeric order, ascending, descending alphabetic order, ascending, descending alphabetic order Copy the content of a cell, cell range within a worksheet, between worksheets, between open, Use the autofill tool/copy handle tool to copy, increment data entries Move the content of a cell, cell range within a worksheet, between worksheets, between open spreadsheets, Delete cell contents Explain move in a worksheet. Create a new spreadsheet based on default template In this section, the file will first be saved as a workbook document Save a spreadsheet to a location on a drive Save a spreadsheet as another file type like: template, text file, software specific file extension, version number Switch between open spreadsheets Understand that a cell should contain only one element of data Enter text in a cell Select a cell, rang of adjacent cells Select a range of non-adjacent cells Select an entire worksheet Edit cell content, modify existing cell content Use the undo, redo command Use the search command for specific content in a worksheet Use the replace command for specific content in a worksheet Sort a cell range by one criterion in ascending, descending numeric order, ascending, |

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| | <p>descending alphabetic order Copy the content of a cell, cell range within a worksheet, between worksheets, between open spreadsheets, Use the autofill tool/copy handle tool to copy, increment data entries, Move the content of a cell, cell range within a, worksheet, between worksheets, between open spreadsheets, delete cell contents, Select a range of non-adjacent cells, Select an entire worksheet, Edit cell content, modify existing cell content, Use the undo, redo command, Use the search command for specific content in a worksheet, Use the replace command for specific content in a worksheet Sort a cell range by one criterion in ascending, descending numeric order, ascending, descending alphabetic order, Copy the content of a cell, cell range within a worksheet, between worksheets, between open spreadsheets Use the autofill tool/copy handle tool to copy, increment data entries Move the content of a cell, cell range within a worksheet, between worksheets, between open spreadsheets Delete cell contents, Select rows and columns, Insert rows and columns, Delete rows and columns, Modify column widths, row heights, Freeze, unfreeze row and column titles, Apply validation rule based on cell content, Apply conditional formatting based on cell content, Switch between worksheets, Insert a new worksheet, Copy, move worksheets between spreadsheets, Rename worksheet, Delete a worksheet, Hide, show rows, columns, worksheets, Change cell content appearance: font sizes, font types, Apply formatting to cell contents: bold, italic, underline, double underline, Apply different colours to cell content, cell background, Copy the formatting from a cell, cell range to another cell, cell range, Enter and format numbers and dates, Format cells to display a currency symbol, Format cells to display a date style, Format cells to display numbers as percentages, Format cells to display a specific number of decimal places, Format cells to display numbers with, without a separator to indicate thousands Apply text wrapping to contents within a cell, cell range Align cell contents: horizontally, vertically. Adjust cell content orientation. Merge cells and Centre a title in a merged cell. Add border effects to a cell, cell range: lines color, Recognize good practice in formula creation: refer to cell references rather than type numbers into formulas Create formulas using cell references and arithmetic operators (addition, subtraction, multiplication, division) Identify and understand standard error values , associated with using formulas: #NAME? #DIV/0!, #REF!, Use sum, average,</p> |
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| | | <p>minimum, maximum, count, counta, round functions</p> <p>Use the logical function if (yielding one of two specific values) with comparison operator: =, >, <</p> <p>Create different types of charts from spreadsheet data: column chart, bar chart, line chart, pie chart, Change worksheet margins: top, bottom, left, right, Change worksheet orientation: portrait, Landscape. Change paper size, Adjust page setup to fit worksheet contents on a specified number of pages Add, edit, delete text in headers, footers in a worksheet Insert and delete fields: page numbering information, date, time, file name, worksheet name into headers, footers Check and correct spreadsheet calculations and text, turn on, off display of gridlines, display of row and column headings for printing purposes Apply automatic title row(s) printing on every page of a printed worksheet, preview a worksheet and print a selected cell range from a worksheet, an entire worksheet, number of copies of a worksheet, the entire spreadsheet, a selected chart</p> |
| Introduction to PowerPoint | 10-11 | <p>This section will explain what a PowerPoint is and how it is benefited. Explain how many ways to open a PowerPoint application. This section gives an overview of the PowerPoint screen elements. New PowerPoint Document. Find and apply a template. Adding Additional Slides. View Slides vs. Outlines. Formatting Text. Slide Transitions. Slide Animations. Starting a Slide Show. Print Preview. Print Layout. Slide Color. Saving Slides. Insert Header & Footer. Inserting Pictures. Inserting Clip Art. Insert Shapes. Inserting WordArt. Inserting Smart Art. Inserting Tables or Charts Inserting Hyperlinks and Creating a Photo Album</p> |
| Internet | 12 | <p>Concept of Internet. Applications of Internet. Connecting to the Internet. Troubleshooting. World Wide Web (WWW). Popular Web Browsing Software Popular Search Engines / Search for content Accessing Web Browser. Using Favourites Folder. Downloading Web Pages. Printing Web Pages and Using e-governance website</p> |
| Practical Topics | Week | Learning Outcome |
| Practical To Introduce Fundamental Computer by software and hardware, all devices. in addition, OS- windows 10 | 3 | |

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| Microsoft Word 2016 | 3 | |
| Microsoft Excel 2016 | 3 | |
| Microsoft Power Point 2016 | 2 | |
| Internet Explore | 1 | |
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Questions Example Design

1. Define the following items briefly:

1. Computer system 2.Memory 3.CPU 4.Control Panel 5.Page setup

2. True or false type of exams:

In this type of exam a short sentence about a specific subject will be provided, and

then students will comment on the trueness or falseness of this particular sentence. Examples should be provided

3. Multiple choices:

In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase. Examples should be provided

EXAMPLE/

Computer consist two main parts and.....

a/ Hardware b/ software c/ program d/system

Answer/

a/ and b/

Extra notes:

External Evaluator