

INSTITUTE	DIPLOMA STUDIES
PROGRAM	DIPLOMA ENGINEERING (CHEMICAL ENGINEERING)
SEMESTER	1
COURSE TITLE	COMPUTER FUNDAMENTAL SKILL
COURSE CODE	09CE2101
COURSE CREDITS	2

Objective:

- 1 The application of Computer knowledge is essential the students of all disciplines of Engineering in addition to their respective branch of study. Objective of this subject is to make the students understand the functioning of MS-Office. It will also help students in particular for creating business documents, data analysis and graphical representations using office automation like MS-Word, MS-Excel and MS PowerPoint.
- 2 The application of Computer knowledge is essential the students of all disciplines of Engineering in addition to their respective branch of study. Objective of this subject is to make the students understand the functioning of MS-Office. It will also help students in particular for creating business documents, data analysis and graphical representations using office automation like MS-Word, MS-Excel and MS-PowerPoint.

Course Outcomes: After completion of this course, student will be able to:

- 1 After completion of this course, student will be able to Personalize their own desktop
- 2 Use various facilities available in the word processor
- 3 Prepare Power Point presentation with different formats
- 4 Create different types of charts
- 5 Prepare PowerPoint presentation
- 6 Understand Internet concepts and usage of e-mail

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	4	0	30	20	25	25
Contents : Unit	Topics						Contact Hours
Total Hours							

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	FUNDAMENTALS OF COMPUTER SYSTEM General understanding of various computer hardware components – CPU, Memory, Display, Keyboard, Mouse, HDD and other Peripheral Devices, Block diagram of computer system, Introduction to OS,, General understanding of various computer hardware components – CPU, Memory, Display, Keyboard, Mouse, HDD and other Peripheral Devices, Block diagram of computer system, Introduction to OS,, OS Installation (Linux and MS Windows), Unix Shell and Commands, vi editor.	9
2	Practical list Study of Basic steps of OS installation (Linux and windows)., Study and Explore security features of Operating Systems., (i) Install screen saver and change the monitor resolution by 1280X960 (ii) Set a new wallpaper (iii) Create, move, delete and rename a folder (iv) Copy, paste and cut a folder/file (v) Display the properties for a file or folder, (i) Restore files and folders from Recycle bin (ii) Create short cuts for folder/file (iii) Find a file or folder by name (iv) Select and move two or more files/folders using mouse (v) Sort folders/files., Visit five websites and prepare summary report about it., Create HTML page contains single paragraph by using basic HTML tags., Create a HTML page with an image in background and different background color., Write a letter about your College about 200 words with two paragraphs and apply following functions (i) Set Arial font of size 12 (ii) Bold Title of College (iii) Make a justify alignment for paragraph text (iv) Use format Painter to format the second paragraph (v) Use 1.5 line spacing in paragraph, Create a newsletter of three pages with two columns text. The first page contains some formatting bullets and numbers. Set the document background colour and add 'confidential' as the watermark. Give the document a title which should be displayed in the header. The header/ footer of the first page should be different from other two pages. Also, add author name and date/ time in the header. The footer should have the page number., Prepare a table using MS word – Sales Analysis for a period of five years for three products and sort that data., Make out print of document by setting page layout and margins., Create a document shown on the Left Margin: 1mm ? Right Margin: 1mm ? Header Margin: 0.8mm from the top edge of the paper ? Footer Margin: 0.7mm from the bottom edge of the paper Define following header: ? Your investment: for odd pages ? Small Savings: for even pages ? Show the page number in footer. Save the document with name "INVEST". Preview the document and Print only the first page of the document. Next, print the entire document in the landscape mode. following page, Define the following settings for the document. ? Page Length: 11mm ? Top Margin: 1.5mm ? Bottom Margin: 1.3mm, Prepare a ORIENT workbook using following function: ? Add heading as a Orient Industries Ltd. in range B2:D2 ? Format the label in the range E6:F7, Create border lines above and below this range. Also create a border line below range E11:F11 ? Add label Item in cell A6,	32

	Quantity in cell B6, Unit price in cell C4 and gross values in D4. ? Enter sales Tax Rate in cell A4 and 8% in cell B4 with two decimal places. ? Use the TODAY() function in cell D4 and NOW() in cell E4.Format cell in the mmm dd,yyyy(e.g. Jan 21,2021) format. ? Change the date format to dd-mmm-yy(e.g.14-Jan-21) format., Using EXCEL prepare a table for Students marks and perform the following functions Total, Average, Percentage, conditional sum., Create a result sheet containing Candidate's Register No., Name and Marks for six subjects. Freezing column containing the Candidate's register no and name Calculate the total and result. The result must be calculated as below and failed candidates should be turned to red. Result is Distinction if Total >= 70 % First Class if Total >= 60 % and < 70 % Second Class if Total >= 50 % and < 60 % Pass if Total >= 35 % and < 50 % Fail otherwise, Prepare line, bar and pie chart to illustrate the subject wise performance of the class for any one semester with the following data Operating Systems 98% C Programming 54% Electrical and Electronics Engineering 87% C Programming Practical 95% Electrical and Electronics Practical 100% Operating Systems Practical 78%, Using EXCEL sheet prepare a table for information about employees in an organization. It containing Employee ID, Employee Name, Designation, Gender, Hire Date. Perform sorting and filtering function on that table., Prepare excel sheet and Perform linking function between two workbook., Prepare a presentation by using Master slide Functionality., Perform Hyperlink functionality in PowerPoint presentation., Make a marketing presentation of any consumer product with at least 10 slides. Use different customized animation effects on pictures and clip art on any four of ten slides., Create an e-mail id and perform the following ? Write an e-mail inviting your friends about an Event that going to be organized by college ? Make your own signature and add it to the e-mail message. ? Add a word attachment of the venue route ? Send the e-mail to at least 5 of your friends. ? Add your Subject Faculty's email id in CC field and Class Coordinator's email id in BCC field., Make a Google group of at least 10 person and share a spreadsheet and invite them to enter their details., Study of Browser features, browsing, using various search engines, writing search queries, Study of Visit various e-governance/Digital India portals, understand their features, services offered.	
3	BASICS OF HTML HTML Basics, Basic structure of HTML, Tags–HTML title, head, body, creation of basic webpage	2
4	OPEN OFFICE-WRITER Introduction to WPS Writer – Examples- Creation of new documents, opening document, insert a document into another document, Page setup, margins, gutters, font properties, Alignment, page breaks, customize header-footer, Saving a document, spell checker, creating a table, entering and editing, changing format of table, height width of row or column, editing-deleting Rows, borders, shading, Templates, drawing objects, mail merge, Printing a document.	9

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
5	OPEN OFFICE-SPREADSHEET Introduction to Workbook & Worksheets; Various Data Types; Using different features with Data, Cell and Texts; Inserting, Removing & Resizing of Columns & Rows; Working with data; Different Views of Worksheets, Column Freezing, Labels, Hiding, Splitting, Use of Formulas, Calculations & Functions; Cell Formatting including Borders & Shading; Working with Different Chart Types; Printing of Workbook & Worksheets with various options.	8
6	PRESENTATIONS Introduction - Opening new presentation, Parts of PowerPoint window, Features of PowerPoint, Background design, Word art, Clip art, Drawings - Animations, Sound, Views, types of views, inserting and deleting slides, arranging slides,, slides show, rehearsal, setup show, custom show - creating custom presentations, auto content wizard, working with auto content wizard	8
7	INTERNET Introduction – Basic Internet skills: Understanding browser, efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals, Getting acquainted with Internet Connection, Browsers, Website URL, Open a website, Net Browsing, Email: Creating E-mail id – Sending, receiving and deleting E-mail - Email with Attachments – CC and BCC, Chatting, Creating Group mail - Google docs.	6
Total Hours		74

Textbook :

- 1 Computer Course, R. Taxali, Tata McGraw Hills, .

References:

- 1 R. Taxali, “Computer Course”, Tata McGraw Hills. New Delhi.
- 2 Wallace Wang, “MS-Office for Dummies”, Wiley India, New Delhi
- 3 Dr. Shailendra Singh, Pawan Thakur, Anurag Jain,” Basic Computer Engineering”, Satya Prakashan, New Delhi, India

Suggested Theory Distribution:

The suggested theory distribution as per Bloom’s taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
35.00	35.00	30.00			

Instructional Method:

- 1 The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- 2 The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room.
- 3 Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.
- 4 Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory

Supplementary Resources:

- 1 The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc. b. The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room. c. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory. d. Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory e. Online resources, Linux man pages, Wikipedia.
- 2 <https://www.geeksforgeeks.org/computer-fundamentals-tutorial/>
- 3 <https://www.geeksforgeeks.org/computer-fundamentals-tutorial/>
- 4 <https://byjus.com/govt-exams/computer-fundamentals/>
- 5 <https://nibmehub.com/opac-service/pdf/read/Fundamentals%20of%20Computers.pdf>