

Department of Computer Science

Open Elective/Generic Elective (OE/GE) Course (Semester-I)

Year	Semester	Course Type	Course Code	Course Title	Theory/ Practical	Credits	No. of Lectures/ Practical to be conducted
1st	I	OE/GE	CS-OE-101T	Basic Fundamentals of Computer	Theory	2	30L
			CS-OE-101P	Lab Course on CS-OE-101T	Practical	2	12P

(Semester-II)

Year	Semester	Course Type	Course Code	Course Title	Theory/ Practical	Credits	No. of Lectures/ Practical to be conducted
1st	I	OE/GE	CS-OE-102T	Introduction to Google tools	Theory	2	30L
			CS-OE-102P	Lab Course Based on CS-OE-102T	Practical	2	12P

OPEN ELECTIVE
(CS-OE-101T) Basic Fundamentals of Computer

Course Title & Course Code	Credits	Credit distribution of the course	
		Theory	Practical
CS-OE-101T Basic Fundamentals of Computer	02	02	--

Learning Objectives:

On completion of this course, the student will -

1. To learn basic fundamentals of computer.
2. To understand handling of Operating System

COURSE OUTCOMES:

After completion of this course student will able to;

- CO-1: Converse in basic computer terminology.
- CO-2: Formulate opinions about the impact of computers on society.
- CO-3: Possess the knowledge of basic hardware peripherals.
- CO-4: Know and use different number systems and the basics of programming.

Unit 1: Basics of Computer and Computer peripherals [08 Hours]

- 1.1 Basic structure and operation of a computer-functional units and their interaction
- 1.2 Translators -Compiler, Interpreter
- 1.3 Primary storage devices– RAM,ROM,PROM, EPROM,EEPROM
- 1.4 Secondary Storage Devices–Pen drive ,HDD ,SSD, External HDD
- 1.5 Introduction to Network devices– Hubs, Switches, Routers, MODEM
- 1.6 Introduction to Binary System– Binary to Decimal, Decimal to Binary conversion

Unit 2: Computer Software [07 Hours]

- 2.1 Types of software: System Software, Application Software
- 2.2 System Software: Operating System

2.3 Introduction to GUI :Desktop Icons, File and Directory structure, Control Panel, File and Directory Search

2.4 Utility programs: Anti-plagiarism software, Anti-virus, Disk Cleaning, Compression/Decompression of file

2.5 Basic Commands- pwd, mkdir, cd, rmdir, cat, cp ,mv, rm, ls, wc, man, grep ,who, whoami, ifconfig

Unit 3: Basics of Internet

[08 Hours]

3.1 Introduction, Objectives

3.2 Internet & WWW

3.3 Website Address and URL

3.4 Applications of Internet

3.5 Modes of Connecting Internet (Hotspot, Wi-Fi, LAN Cable, Broadband, USB Tethering)

3.6 Popular Web Browsers(Internet Explorer/Edge, Chrome, Mozilla Firefox etc)

3.7 Exploring the Internet

Unit 4: E-mail

[07 Hours]

4.1 Introduction to Gmail Window

4.2 How to add contacts (E-Mail)/Edit contacts

4.3 Details of Compose dialog box fields- To, CC, BCC, Subject etc., Compose an e-mail, add attachment and add signature, How to add more than one recipients at a time (from excel file)+Comma, Separated list(notepad)

4.4 e-mail Formatting

4.5 How to send Reply/Forward the mail

4.6 E-mail Settings: download (set directory/drive other than C drive), signature etc.
Inbox: all options

4.7 Managing E-mail

ESSENTIAL/RECOMMENDED READINGS:

1. Computer Fundamentals by P.K.Sinha, Priti Sinha, BPB publication
2. Unix Concepts and Applications by Sumitabha Das, McGraw Hill Education publication

OPEN ELECTIVE
(CS-OE-101P) Introduction to Computer Laboratory

Course Title & Course Code	Credits	Credit distribution of the course	
		Theory	Practical
CS-OE-101P Introduction to Computer Laboratory	02	--	02

Assignment 1. Identify and use the following hardware parts and peripherals.

- a. Printer, Scanner and Web Cam.
- b. Different Ports used in computer.
- c. DVD Drive and USB Devices.

Assignment 2. Do the following operations

- a. Booting the system and Customize the desk top.
- b. Create a new folder and a file.
- c. Copy the created file to a new folder.
- d. Rename, Copy and Delete the created file and folder.

Assignment 3. Create an application and prepare neat curriculum Vitae for

Applying a job in a company. Apply Page format and Paragraph format to the above document and take the hard copy.

Assignment 4. Prepare a mark list and find out Grade of each subject using

Functions and take the hard copy (Apply cell insertion deletion and merge).

Assignment 5. Prepare a presentation with five slides including animation, insertion of Scanned images.

Assignment 6. Create an email id and send, receive and forward mails with attachments.

Assignment 7. Search a specified content using internet, download it and then insert it into a presentation.

Assignment 8. Create a file (document / worksheet/ presentation) and upload it in the pdf format.

OPEN ELECTIVE
(CS-OE-102T) Introduction to Google tools

Course Title & Course Code	Credits	Credit distribution of the course	
		Theory	Practical
CS-OE-102T Introduction to Google Tools	02	02	--

Description: This certificate course is designed to provide Introduction to Google Tools

Learning Objectives: After completion of this module, students would be able to understand the concept of Google Tools and issues and challenges associated with it.

Learning Outcomes:

On completion of this course, students will be able to:

1. Students learn With the Google Apps Fundamentals course, you'll learn how to set up an account, work with the ins and outs of the Drive organizational tools, and control your files,
2. Students learn all the way from signing in and creating new folders to securely collaborating with others and working when you don't have Wi Fi.
3. Students learn how to use and optimize Drive, Docs, Sheets, Slides, and Forms, and how to use these tools on the run via Google Mobile Apps

Unit 1: Introduction

[5 Hrs]

Acquire the essentials for using Google apps: Drive, Docs, Sheets, Slides, and Forms.

Unit 2: Google Drive

[5 Hrs]

Move through the basics of setting up a Google Drive account complete with personalized folders, helpful apps, file conversion, sharing, and even editing offline! It's the full Google Drive overview, with tips for both newbies and those who are more familiar with this cloud-based platform.

Unit 3: Google Docs

[5 Hrs]

Work with the specifics on Google Docs, including creating documents, exploring and organizing your own Docs, starting a new document, formatting text effectively using the toolbar, inserting images, drawings, and charts, creating tables, using the web clipboard to save parts of a document to paste into another one, different sharing modes/permissions (editing, suggesting, or viewing), and using the revision history tool.

Unit 4: Google Sheets

[5 Hrs]

Learn to create, edit, analyze, manipulate, and share spreadsheets using Google Sheets. The section covers the basic toolbar and sorting tools, as well as using the commenting tool to collaborate, customizing/adding tabs to a sheet, using formulas, inserting charts to analyze information, sharing and permissions, freezing rows and column, and filtering to organize data. Discover tips for all levels of spreadsheet users, including information about data entry efficiency and safety, revision history,

helpful add-ons, and ideas for how to use this tool in the classroom.

Unit 5: Google Slides**[5 Hrs]**

A step-by-step on Google's presentation app, recently renamed Google Slides. This section covers the basics of creating, editing, sharing, and presenting using Google Slides. Collaboration and tools for making presentations unique and artistic are also covered.

Unit 6: Google Forms**[5 Hrs]**

Google's Form app is so accessible, you can get responses from students or parents without the hassle of loose paper or handouts. In this section, you will learn how to send and receive forms through Google Drive so you can review them instantaneously. Use forms for assessments, class votes, or gathering general information. Here you will learn how to create, customize and send surveys, and how and where to most efficiently collect and sort responses.

ESSENTIAL/RECOMMENDED READINGS:

1. Introduction to Google for Education Publisher: i-Learn Center, Universiti Teknologi MARA Authors: [Johan Eddy Luaran](#)

OPEN ELECTIVE

(CS-OE-102P) Lab Course Based on CS-OE-102T

Course Title & Course Code	Credits	Credit distribution of the course	
		Theory	Practical
CS-OE-102P Lab Course Based on CS- OE-102T	02	02	--

Description: Google Web Tools provides resources to help you improve your site's structure, the way it's displayed in Google search, and the quality of its user experience.

Learning Objectives: After completion of this module, students would be able to understand Google Web Tools provides resources to help you improve your site's structure, the way it's displayed in Google search, and the quality of its user experience.

Assignments:

1. Assignment on Google Email
2. Assignment on Google Drive
3. Assignment on Google Calendar
4. Assignment on Google Docs, Sheets, Slides
5. Assignment on G Talk
6. Assignment on Google Maps
7. Assignment on Google Contacts
8. Assignment on Google Assistant