

Maharashtra State Board of Technical Education, Mumbai

TEACHING PLANNING (TP)/CIS

K-1

Academic Year: 2026-27

Date: 01/08/2026

Institute Name & Code: K. K. Wagh Polytechnic, Nashik-3(0078)

Program and Code: Artificial Intelligence and Machine Learning (AN) **Course Code & Abbr.:** 311001 (ICT)

Course Name: Fundamentals of ICT (ICT)

Name of Faculty: Ms. V. N. Lawand

Class: FYAN-Neural

Course Index: 104

Semester: Ist

Scheme: K

Total Hrs: 15

● Teaching-Learning and Examination Scheme:

Course Code	Course Title	Abbr	Course Category/s	Learning Scheme						Credits	Assessment Scheme												Total Marks
				Actual Contact Hrs./Week			SLH	NLH	Paper Duration		Theory			Based on LL & TSL				Based on SL					
														Practical									
				CL	TL	LL					FA-TH	SA-TH	Total		FA-PR		SA-PR		SLA				
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min												
311001	FUNDAMENTALS OF ICT	ICT	SEC	1	-	2	1	4	2		-	-	-	-	25	10	25@	10	25	10	75		

Abbreviations: CL- Classroom Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, SLA - Self Learning Assessment, Legends: @ Internal Assessment.

● Course Outcomes (COs) & Theory Learning Outcomes (TLOs):

By learning course Fundamentals of ICT (ICT-311001) First Year students will be able to:

CO No.	TLO's No.	Course Outcomes (COs) / Unit Outcomes (TLO's)
CO104.1		Use computer system & its peripherals for given purpose
	TLO 1.1	Explain the functions of components in the block diagram of computer system.
	TLO 1.2	Classify the given type of software
	TLO 1.3	Explain characteristics of the given type of network
	TLO 1.4	Describe application of the given type of network connecting device
	TLO 1.5	Describe procedure to manage a file /folder in the given way
CO104.2		Prepare Business document using Word Processing Tool
	TLO 2.1	Write steps to create the given text document.
	TLO 2.2	Explain the given feature for document editing.
	TLO 2.3	Explain the given page setup features of a document.
	TLO 2.4	Write the given table formatting feature.
	TLO 2.5	Write the steps to set the given type of document layout
CO104.3		Analyze Data and represent it graphically using spreadsheet
	TLO 3.1	Write steps to create the given spreadsheet.
	TLO 3.2	Explain the given formatting feature of a worksheet.
	TLO 3.3	Write steps to insert formula and functions in the given worksheet.
	TLO 3.4	Write steps to create charts for the given data set.
	TLO 3.5	Explain steps to perform data filter, sort and validation operations on the given data set.
	TLO 3.6	Write steps to setup and print a spreadsheet.
CO104.4		Prepare professional Slide Show presentation
	TLO 4.1	Write the steps to create the given slide presentation.
	TLO 4.2	Write the steps to insert multiple media in the given presentation.
	TLO 4.3	Explain the method of including animation, transition effects in slide show.

	TLO 4.4	Write steps to apply table features in the given presentation
	TLO 4.5	Write steps to manage charts in the given presentation
CO104.5 CO104.6		Use different types of Web Browsers and Apps Explain concept and applications of Emerging Technologies
	TLO 5.1	Explain use of the given setting option in browsers.
	TLO 5.2	Explain the given option used for effective searching in search engine
	TLO 5.3	Explain features of the given web service.
	TLO 5.4	Explain concepts and applications of emerging technologies
	TLO 5.5	Use various elementary cloud-based tools.

● Teaching Plan:

Chapter No. (Alloted Hrs.)	TL O's	Title/Topic Details with CO	Plan (From-To & No. of Lectures)	Actual Execution (From-To & No. of Lectures)	Teaching Method/ Media	Remark
01 (02)	1.1	Unit – I Introduction to Computer System [CO1] 1.1 Basics of Computer System: Overview of Hardware and software: Block diagram of Computer System Input/ Output unit of CPU, Control Unit, Arithmetic Logic Unit(ALU), Memory	7/08/2026 To 7/08/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom	
	1.2	1.2 Internal Components: Processor, Mother Boards, Random Access Memory(RAM), Read Only Memory (ROM), Video Cards, Sound Cards and internal hard disk drives.				
	1.3	1.3 External Devices: Types of input/output devices , type of monitors, Keyboard, Mouse, printers: Dot matrix, Inkjet and LaserJet, plotter and scanner, external device storage devices CD/DVD, Hard disk and pen.				
	1.4	1.4 Application Software: Word processing, spreadsheet, database management systems, control software, measuring software, photo-editing software, video-editing software, graphics manipulation software. System Software compilers, linkers, device drivers, operating systems.	14/08/2026 To 14/08/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom	
	1.5	1.5 Network environments: Network Interface Cards, hubs, switches, routers and modems, concept of LAN, MAN, WAN, WLAN, Wi- Fi and Bluetooth.				
	1.6	1.6 Working with Operating Systems: Create and manage file and folders, Copy a file, renaming and deleting of files and folders, Searching files and folders, application installation, creating shortcut of application on the desktop.				
02. (03)	2.1	Unit – II Word Processing[CO2] 2.1 Word Processing: Overview of Word processor Basics of Font type, size, colour, Effects like Bold, italic, underline, Subscript and superscript, Case changing options, editing. Previewing a document, Saving a document, Closing a document and exiting application.	21/08/2026 To 21/08/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Word	
	2.2	2.2 Editing a Document: Navigate through a document. Scroll through text, Insert and table delete text, Select text, Undo and redo commands, Use drag and drop to move text, Copy, cut and paste, Use the clipboard, Clear formatting, Format and align text, Formatting Paragraphs, Line and paragraph spacing, using FIND and REPLACE, Setting line pacing, add bullet and numbers in lists, add borders and shading, document views, Page settings and margins, Spelling and Grammatical checks				

	2.3	2.3 Changing the Layout of a Document: Adjust page margins, Change page orientation, Create headers and footers, Set and change indentations, Insert and clear tabs.	28/08/2026 To 28/08/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Word	
	2.4	2.4 Inserting Elements to Word Documents: Insert and delete a page break, Insert page numbers, Insert the date and time, Insert special characters (symbols), Insert a picture from a file, Resize and reposition a picture.				
	2.5	2.5 Working with Tables: Insert a table, Convert a table to text, Navigate and select text in a table, Resize table cells, Align text in a table, Format a table, Insert and delete columns and rows, Borders and shading, Repeat table headings on subsequent pages, Merge and split cells.	04/09/2026 To 04/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Word	
	2.6	2.6 Working with Columned Layouts and Section Breaks: a Columns, Section breaks, Creating columns, Newsletter style columns, Changing part of a document layout or formatting, Remove section break, Add columns to remainder of a document, Column widths, Adjust column spacing, Insert manual column breaks				
03. (03)	3.1	Unit – III Spreadsheets [CO3] 3.1 Working with Spreadsheets: Overview of workbook and worksheet, Create Worksheet Entering sample data, Save, Copy Worksheet, Delete Worksheet, Close and open Workbook	05/09/2026 To 05/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Excel	
	3.2	3.2 Editing Worksheet: Insert and select data, adjust row height and column width, delete, move data, insert rows and columns, copy and paste, find and replace, spell check, Zoom In-out, Special symbols, Insert Comments, Add Text Box, Undo changes, Freeze Panes, Hiding/ Unhiding Rows And Columns				
	3.3	3.3 Formatting Cells and sheet: Setting cell Type, Setting fonts, Text Options, Rotate Cell, Setting Colors, Text Alignments, Merge and Wrap, Apply Borders and Shades, Sheet options, Adjust Margins, Page Orientation, Header and Footer, Insert Page Breaks, Set Background	11/09/2026 To 11/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Excel	
	3.4	3.4 Working with Formula: Creating Formulas, Coping Formulas, Common Spread Sheet Functions such as sum, average, min, max, date, in, and, or, mathematical functions such as sqrt, power, aplying conditions using IF.				
	3.5	3.5 Working with Charts: Introduction to charts, overview of different types of charts, Bar, Pie, Line, Creating and editing Charts, Using Chart Options: Chart Title, axis title, legend, data labels, Axes, grid lines, moving charts in a separate sheet.	12/09/2026 To 12/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Excel	
	3.6	3.6. Advanced Operations: Conditional Formatting, Data Filtering, Data Sorting, Using Ranges, Data Validation, Adding Graphics, Printing Worksheets, print area, margins, header, footer and other page setup options				
04. (04)	4.1	Unit – IV Presentation Tool [CO4] 4.1 Creating a Presentation: Outline of an effective presentation, Identify the elements of the User Interface, Starting a New Presentation Files, Creating a Basic Presentation, Working with textboxes, Apply Character Formats, Format Paragraphs, View a Presentation, Saving work, creating new Slides, Changing a slide Layout, Applying a theme, Changing Colours, fonts and effects, apply custom Colour and font theme,	18/09/2026 To 18/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Power Point	

	4.2	4.2 Inserting Media elements: Adding and Modifying Graphical Objects to a Presentation - Insert Images into a insert Presentation, Working with textboxes, Apply clips, video/animation, Add Shapes, Add Visual Styles to Text in a Presentation, Edit Graphical Objects on a Slide, Format Graphical Objects on a Slide, Group, Graphical Objects on a Slide, Apply an Animation Effect to a Graphical Object, Add Transitions, Add Speaker Notes, and Print a Presentation.	19/09/2026 To 19/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Power Point	
	4.3	4.3 Working with Tables: Insert a Table in a Slide, Format Tables, and Import Tables from Other Office Applications.	25/09/2026 To 25/09/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom, MS Office Power Point	
	4.4	4.4 Working with Charts: Insert Charts in a Slide; Modify a Chart, Import Charts from Other Office Applications.	09/10//2026 To 09/10/2026 (1)			
05. (03)	5.1	Unit – V Basics of Internet and Emerging Technologies [CO5, CO6] 5.1 World Wide Web: Introduction, Internet, Intranet, Cloud, Web Sites, web pages, URL, web servers, basic settings of web browsers. history, extension, default page, default search engine, creating and retrieving bookmarks, use search engines effectively for searching the content.	16/10/2026 To 16/10/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom	
	5.2	5.2 Web Services: e-Mail, Chat, Video Conferencing, e-learning, e-shopping, e- Reservation, e-Groups, Social Networking.	23/10/2026 To 23/10/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom	
	5.3	5.3 Emerging Technologies: IOT, AI and ML, Drone Technologies 3D Printing 5.4 Tools: Docs, Drive, forms, quiz, Translate and Apps	30/10/2026 To 30/10/2026 (1)		Chalk, Board, PPT, LCD, Google Classroom	
15		Total	15 Hrs.			

- **Chapter wise PO's Mapping:**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO- 1	PSO- 2
CO1	1	-	-	-	-	-	1	2	1
CO2	-	-	-	3	-	-	1	2	1
CO3	-	2	1	3	-	-	1	1	1
CO4	-	-	-	3	-	-	1	1	3
CO5	1	-	-	3	-	-	3	1	3
CO6	1	-	-	3	-	-	3	1	3
Legends:- High:03, Medium:02,Low:01, No Mapping: - *PSOs are to be formulated at institute level									

- PSO1: Apply fundamental concepts of Computer Engineering and Artificial Intelligence and machine learning to solve technical problems.
- PSO2: Implement the domain knowledge to achieve successful career as an engineering professional.

- **Direct Assessment Criteria:**

- **Formative assessment (Assessment for Learning)**
Lab performance, Assignment, Self-learning and Seminar/Presentation
- **Summative Assessment (Assessment of Learning)**
Lab. Performance, viva vice

● References:

1. Books :-

Sr. No.	Title	Author	Publisher
1	Computer Fundamentals	Goel, Anita	Pearson Education, New Delhi, 2014, ISBN: 978-8131733097
2	Computer Basics Absolute Beginner's Guide, Windows 10	Miller, Michael	QUE Publishing; 8th edition August 2015, ISBN: 978-0789754516
3	Linux: Easy Linux for Beginners	Alvaro, Felix	Createv Space Independent Publishing Platform- 2016, ISBN: 978-1533683731
4	Microsoft Office 2010: On Demand	Johnson, Steve	Pearson Education, New Delhi India, 2010; ISBN:9788131770641
5	Microsoft Office 2010 for Windows: Visual Quick start	Schwartz, Steve	Pearson Education, India, 2012, New Delhi ISBN:9788131766613
6	OpenOffice.org for, Dummies	Leete, Gurdy, Finkelstein Ellen, Mary Leete	Wiley Publishing, New Delhi 2003 ISBN: 978-0764542220

2. Web sites:

- <https://learnlinuxandlibreoffice.org/>
- https://www.tutorialspoint.com/computer_fundamentals/
- https://en.wikipedia.org/wiki/LibreOffice_Calc
- <https://www.tutorialspoint.com> › Computer Fundamentals › Computer - Input Devices
- <http://study.com/academy/lesson/what-are-peripheral-devices-of-a-computer-definition-examples-types.html>
- <http://www.tutorialsforopenoffice.org/>
- <https://www.libreoffice.org>
- <https://www.openoffice.org>

3. Tools: Google classroom, MKCL LMS-Learn Live, YouTube

Ms. V. N. Lawand
(Name & Signature of Staff)

Mrs.R.Y.Thombare
(Name & Signature of HOD)