DEPARTMENT OF COMPUTER SCIENCE
CERTIFICATE COURSE 2023-2024
(II DC COMPUTER SCIENCE)

Course Title   : LFCC23CS2 Advanced Features in Excel

Course Duration   : 30 hours

Module 1: Excel Basics and Functions (8 hours)

Introduction to MS Excel: Overview, features, and interface,Creating, opening, saving, and closing workbooks, Entering data, editing, and formatting cells. Basic calculations and formulas.Working with functions (SUM, AVERAGE, COUNT, IF, etc.).Using absolute and relative cell references. Managing worksheets and workbooks

Module 2: Advanced Excel Functions (8 hours)

Logical functions (IF, AND, OR, NOT). Lookup and reference functions (VLOOKUP, HLOOKUP, INDEX, MATCH), Date and time functions, Text functions (CONCATENATE, LEFT, RIGHT, MID, etc.). Financial functions (PMT, FV, PV, etc.) Statistical functions (AVERAGEIF, COUNTIF, etc.) Array formulas and their applications. Using Named Ranges

Module 3: Data Analysis and Visualization (8 hours)

Sorting and filtering data, Data validation and conditional formatting, Creating and formatting tables
PivotTables: Creating, customizing, and analyzing data, PivotCharts: Creating and visualizing data
Creating and customizing charts (bar, line, pie, etc.), Sparklines: Adding small charts in cells, Using data analysis tools (Goal Seek, Scenario Manager, Solver)

Module 4: Advanced Excel Techniques (6 hours)

Advanced data manipulation and data cleaning, Working with external data sources (Importing and exporting data), Data consolidation from multiple sheets/workbooks, Protecting worksheets and workbooks, Creating and editing macros.