

**VALUE ADDED COURSE OFFERED BY DEPARTMENT OF BUSINESS
MANAGEMENT**

NAME OF THE COURSE: ADVANCED EXCEL SKILL

COURSE CODE: BM-VAC-202

DURATION: 45 hrs.

Course Objective:

The course intends to develop the competencies of the students to deal with real life situations and make them able to utilise their technical skills effectively by summarizing data in worksheets and workbook. The objectives of the course are:

1. Edit worksheets using advanced enhancements and worksheet features.
2. Import and export data from the Internet and merge the data in to Excel worksheets and publish Excel worksheets on the web.
3. Enhance lists using pivot tables and pivot table charts
4. Audit and check worksheets and workbooks for errors
5. Work with data tables and scenario management
6. Use case studies to create worksheets and workbooks.

Module I: _____ (08 hours)

What if analysis: Goal Seek, Scenario Analysis, Data Tables (PMT Function), Solver Tool.

Logical Functions: If Function, How to Fix Errors – if error, Nested If, Complex if and or functions

Data Validation: Number, Date & Time Validation, Text and List Validation, Custom validations based on formula for a cell, Dynamic Dropdown List Creation using Data Validation – Dependency List

Module II: _____ (09 hours)

Lookup Functions: Vlookup / HLookup, Index and Match, Creating Smooth User Interface Using Lookup, Nested VLookup, Reverse Lookup using Choose Function, Worksheet linking using Indirect, Vlookup with Helper Column

Pivot Tables: Creating Simple Pivot Tables, Basic and Advanced Value Field Setting, Classic Pivot table, Choosing Field, Filtering PivotTables, Modifying PivotTable Data, Grouping based on numbers and Dates, Calculated Field &

Calculated Items, Arrays Functions, What are the Array Formulas, Use of the Array Formulas?, Basic Examples of Arrays (Using ctrl+shift+enter), Array with if, len and mid functions formulas, Array with Lookup functions, Advanced Use of formulas with Array.

Module III: _____ **(09 hours)**

Charts and slicers: Various Charts i.e. Bar Charts / Pie Charts / Line Charts, Using SLICERS, Filter data with Slicers, Manage Primary and Secondary Axis

Excel Dashboard: Planning a Dashboard, Adding Tables and Charts to Dashboard, Adding Dynamic Contents to Dashboard

Module IV: _____ **(06 hours)**

VBA Macro

Introduction to VBA: What Is VBA?, What Can You Do with VBA?, Recording a Macro, Procedure and functions in VBA, Variables in VBA, What is Variables?, Using Non-Declared Variables, Variable Data Types, Using Const variables, Message Box and Input box Functions, Customizing Msgboxes and Inputbox, Reading Cell Values into Messages, Various Button Groups in VBA, If and select statements, Simple If Statements, The Elseif Statements, Defining select case statements

Unit V: _____ **(08 hours)**

Looping in VBA: Introduction to Loops and its Types, The Basic Do and For Loop, Exiting from a Loop, Advanced Loop Examples

Mail Functions – VBA: Using Outlook Namespace, Send automated mail, Outlook Configurations, MAPI, Worksheet / Workbook Operations

Course Outcome:

At the end of the course the students will be able to:

1. Use advanced functions and productivity tools to assist in developing worksheets.
2. Manipulate data lists using Outline, Autofilter and PivotTables
3. Use Consolidation to summarise and report results from multiple worksheets

4. Record repetitive tasks by creating Macros
5. Use Hyperlinks to move around worksheets.
6. Create a loop using VBA.

Pedagogy:

Each module comprises of instructor led training followed by evaluation at the end of the module as a part of continuous assessment. The instructor will adopt interactive mode through classroom participation, simulation & case based discussion. The instructor can also share audio-visual materials as additional readings or for case discussion. Cases are to be shared by the instructor to the participants as and when required

Assessment:

The assessment will constitute two parts. The first part is continuous assessment throughout the course consisting two components and total marks allotted is 50. The second part is end-term assessment consisting of 50 marks to be assessed through two components. The assessment will be done by administering one hour written test and demonstration to be evaluated by three evaluators including the coordinator

Sl.No.	Continuous Assessment (Components)	Total no.	Mark Allotted	Total Marks
1	MCQ to be administered at the end of the module	05	0.5X10=5	25
2	Assignment(Based on Individual/Group activities)	05	05	25
Sl.No.	End-Term Assessment(Components)	Total no.	Mark Allotted	Total Marks
3	Demonstration(Presentation based on Practical)	01	25	25
4.	Written Test(Pattern to be decided by concerned Instructor/coordinator of the course/Department)	01	25	25

References & Audio-visual Materials:

1. Michael Alexander, Excel 2019 Bible, 1st Edition, Wiley Publisher.
2. Greg Harvey, Excel 2019 All-in-One For Dummies, 1st Edition.
3. Thomas Susan, VBA Programming in Excel, Createspace Independent Publishing Platform
4. Walkenbach John, Excel 2010 Power Programming with VBA, John Wiley & Sons Inc publisher.