



Gyanmanjari
Innovative University

Course Syllabus
Gyanmanjari Institute of Management Studies
Semester-2 (MBA)

Subject: Advance Excel- MBAXX12306

Type of course: Skill Enhancement Course (SEC)

Prerequisite:

To excel in advanced Excel, foundational knowledge of basic Excel functions is crucial. Familiarity with formulas, functions (e.g., VLOOKUP, HLOOKUP, INDEX-MATCH), and data manipulation tools is essential. Understanding data validation, sorting, filtering, and pivot tables is fundamental. Proficiency in advanced charting, conditional formatting, and array formulas is beneficial. Knowledge of Power Query for data import and transformation, Power Pivot for data modeling, and Power BI for visualization enhances advanced Excel skills. Additionally, a grasp of macros, VBA programming, and data analysis techniques is advantageous. Continuous practice, exploring diverse datasets, and solving real-world problems will reinforce proficiency in advanced Excel capabilities.

Rationale:

Advanced Excel skills enhance data analysis, automate complex tasks, and improve decision-making. Proficiency in functions like VLOOKUP, PivotTables, and macros streamlines workflow, boosts productivity, and enables professionals to uncover valuable insights from large datasets, making them indispensable in today's data-driven business environment.



Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks					Total Marks
CI	T	P		C	Theory Marks		Practical Marks		
			ESE		MSE	V	P	ALA	
00	00	04	02	00	00	10	40	50	100

Legends: CI-Classroom Instructions; T – Tutorial; P - Practical; C – Credit; ESE – End Semester Examination; MSE- Mid Semester Examination; V – Viva; CA - Continuous Assessment; ALA-Active Learning Activities.

Course Content:

Sr. No	Course content	Hrs.	% Weightage
1	Introduction to Excel & Working with Formulas and Functions <ul style="list-style-type: none"> ● Overview of Microsoft Excel interface ● Understanding the Ribbon and Quick Access Toolbar ● Navigating worksheets and workbooks ● Basic data entry and formatting ● Introduction to Excel formulas ● Essential functions (SUM, AVERAGE, MAX, MIN) 	7	25
2	Data Management Techniques & Advanced Formulas and Functions <ul style="list-style-type: none"> ● Sorting and filtering data ● Data validation and drop-down lists ● Managing and organizing data using tables ● Logical functions (IF, AND, OR) ● Lookup functions (VLOOKUP, HLOOKUP, INDEX, MATCH) ● Text functions (CONCATENATE, LEFT, and RIGHT, MID) 	8	25



3	<p>Data Visualization and Charts & Conditional Formatting and Data Analysis</p> <ul style="list-style-type: none"> ● Creating and customizing charts (bar, line, pie, etc.) ● Data bars and color scales for visual analysis ● Applying conditional formatting rules ● PivotTables and Pivot Charts introduction 	7	25
4	<p>Introduction to PivotTables & Advanced Excel Functions and Final Project</p> <ul style="list-style-type: none"> ● Creating PivotTables and Pivot Charts ● Filtering and sorting data in PivotTables ● Array formulas for complex calculations ● Applying learned skills to a real-world scenario 	8	25

Continuous Assessment:

Sr. No	Active Learning Activities	Marks
1	<p>Budgeting Exercise Instructions related to hypothetical budget will be provided by the faculty and students have to prepare the budget in Excel using formulas and functions and insert chart and upload the Excel file in GMIU Web Portal.</p>	10
2	<p>Data Analysis Project Faculty will provide a dataset and a set of questions or tasks related to data analysis and students will provide solutions using Excel formulas and functions and upload it on GMIU Web Portal.</p>	10
3	<p>Excel Puzzle Students will be given a puzzle related to Excel formulas and students have to complete the puzzle in GMIU Web Portal.</p>	10
4	<p>Pivot Table Challenge Students will be provided a set of data and they have to summarize it in pivot tables and then upload the file in GMIU Web Portal.</p>	10
5	<p>V-Lookup Challenge Faculty will provide a set of data where the students have to apply V-Lookup and sort the data upload it to GMIU Web Portal</p>	10
Total		50



Sr. No	Practical's	Unit no	App hours
1	Overview of Microsoft Excel interface, Understanding the Ribbon and Quick Access Toolbar, Navigating worksheets and workbooks	1	6
2	Basic data entry and formatting, Introduction to Excel formula, Essential functions (SUM, AVERAGE, MAX, MIN)	1	6
3	Sorting and filtering data, Data validation and drop-down lists, Managing and organizing data using tables	1	3
4	Logical functions (IF, AND, OR)	2	6
5	Lookup functions (VLOOKUP, HLOOKUP, INDEX, MATCH)	2	8
6	Text functions (CONCATENATE, LEFT, and RIGHT, MID)	2	6
7	Creating and customizing charts (bar, line, pie, etc.)	2	4
8	Data bars and color scales for visual analysis	2	4
9	Applying conditional formatting rules	3	3
10	PivotTables and Pivot Charts introduction	3	3
11	Creating PivotTables and Pivot Charts, Filtering and sorting data in PivotTables	3	2
12	Array formulas for complex calculations	3	2
13	Applying learned skills to a real-world scenario	4	7
	Total		60



Suggested Specification table with Marks (Theory): NA

Distribution of Theory Marks (Revised Bloom's Taxonomy)						
Level	Remembrance (R)	Understanding (U)	Application (A)	Analyze (N)	Evaluate (E)	Create (C)
Weightage	0%	0%	0%	0%	0%	0%

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcome:

After learning the course, the students should be able to:	
CO1	Understand and gain a solid grasp of fundamental of Excel and use of formulas and functions
CO2	Apply data management techniques and advanced formulas and functions
CO3	Analyze data visualization and charts and use conditional formatting and do data analysis
CO4	Create pivot tables and use advanced excel functions. Apply complete learning in real world scenario



Instructional Method:

The course delivery method will depend upon the requirement of content and the needs of students. The teacher, in addition to conventional teaching methods by black board, may also use any tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, e-courses, Virtual Laboratory

The internal evaluation will be done on the basis of Active Learning Assignment

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in the laboratory.

Reference Books:

1. "Power Excel with MrExcel: Master Pivot Tables, Subtotals, Charts, VLOOKUP, IF, Data Analysis in Excel 2010–2013" by Bill Jelen
2. "Excel 2016 Bible" by Michael Alexander and Richard Kusleika
3. "Advanced Excel: Power Query, Power Pivot & Data Modeling in Excel" by Abhishek Agarwal
4. "Excel for Advanced Level" by R. S. Aggrawal

