### Punyashlok Ahilyadevi Holkar Solapur University, Solapur

## **Skill Development Centre**

### "Certificate Course in Advanced Excel"

## Syllabus

#### **Duration of course :** 6 months

#### Need of Course :

1 Excel allows doing calculations in a fast manner, which speeds up productivity.

**2** Excel spreadsheets provide a clear picture of the information that is input and create tracking systems for different departments and operations.

**3** Understanding Excel at an advanced level means that you will be able to use more sophisticated tools and complete tasks and analyze data quickly.

**4** Excel is spreadsheet software that allows you to organize information and sort information that can easily be analyzed and transferred to graphs or charts for better viewing.

### **Employment and Entrepreneurship Opportunities from Course:**

1 After learning MS Excel skill, student will be able to become MIS executive. The main work of an MIS Executive is preparing MIS reports on a daily, weekly as well as on monthly basis.

**2** The main work of project manager is to take the overall charge of a particular project of the company. Project manager plays the lead role in the project by monitoring, planning, execution, and closing out the projects. MS Excel skills are useful to do all this. Therefore student will be able to become project manager

**3** After completing this course, student will be able to become store manager in a company. The excel will help in Checking the all inventories, preparing budget, analyse market trends which will increase the profit.

Tentative Fees : Rs.2000/-

Minimum Admission Eligibility for Student : Minimum 12th Pass

## **Syllabus Structure**

## Course Title: "Certificate Course in Advanced Excel"

### **Course Duration: 6 Months**

Name of Skill Course	Duration	Name of Paper	Paper	Hours Per Paper	Th.	Int.	Pract.	Credits
Certificate Course in Advanced	6 Months	Advanced Excel	Ι	45	80	20		3 Credits
Excel		Assignments	II	45			100	3 Credits
		Project	III	45			100	3 Credits
		Practical	IV	45	80	20		3 Credits
			Total	180	160	40	200	12 Credits

### Abbreviations:

Th. - Theory Evaluation, Int. - Internal Evaluation, Pract. - Practical evaluation.

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# **Skill Development Centre**

Co	Course Title : Certificate Course in Advanced Excel				
L	SYLLABUS Details				
1)	Paper Title	Advanced Excel			
2)	Paper No	Ι			
3)	Objectives	1. To identify different elements of Excel Worksheet.			
	of Paper	2. To identify and know the application of different menus in excel			
		3. To get acquainted with statistical, mathematical and commercial	functions		
		rigorously.			
		4. To get familiarity with HLookUp, VLookUp functions.			
		5. To be able to create Excel extensions.			
4)	Expected	After studying this paper students will be able to			
	out comes	1. Extract and manipulate the data in excel worksheet.			
	from Paper	2. Perform basic statistical and graphical analysis.			
		3. Write and execute Excel-macros.			
		4. Create a report using Excel worksheet			
5)		Content			
	Unit-1	1. Introduction to MS excel 2013	11 Hrs		
		<ol> <li>Starting MS Excel 2013 Application</li> <li>Working with Ribbon &amp; Quick Access Toolbar</li> </ol>			
		4. Worksheet fundamentals			
		5. Selecting Cells & Ranges			
		6. Formatting Cell and Worksheet			
		7. Conditional Formatting			
		<ol> <li>8. Insert Tab in Excel 2013</li> <li>9. Create Custom Tables</li> </ol>			
		10. Sorting Data			
		11. Advance filter			
		12. Creating Charts & Graphics			
		13. Chart types			
		14. Sparkline			
		<ul><li>15. Pivot table &amp; Pivot chart</li><li>16. Insert slicer</li></ul>			
		17. Graphics & Designing in Excel			
		18. Working with Pictures, Clipart & shapes			
		19. Smart Art Objects			
		20. Hyperlinks			
		21. Printing Your Work			
<u> </u>		22. Page Layout options			

	23. Analyzing Data with Excel	
	24. Get External Data from Various sources	
	25. Data Validation	
	26. Performing spreadsheet What-If analysis	
	27. Scenario, Goalseek, Data Table	
	28. Solver	
	29. Macro	
	30. Developer Tab	
Unit-2	1 Working with Formulas & Functions Function Librory	11 Hrs
	1. Working with Formulas & Functions Function Library	
	2. Logical Functions: AND, IF, OR, NOT, TRUE & FALSE	
	Functions	
	3. Text Functions :Search, Mid, Exact, Substitute, Replace, Find,	
	Proper, Fixed, Trim, Clean, Text	
	4. Concatenate & T Functions	
	5. Date & Time Functions: Date, Today, Weekday, Datevalue,	
	Time, Hour, Now, Days 360, Edate, Eomonth, Networkdays	
	etc	
	6. Financial Functions: Fv, Pmt, Pv, Rate, Nper, SLn, Db, Syd	
	etc.	
	7. LOOKUP & Reference Function: Match, Vlookup, Hlookup,	
	Lookup, Index, Offset	
	8. Mathematical Functions: Sign, Gcd, Lcm, Product,	
	Sumproduct, Sumif, Ceiling, Fact, Mmult, Combin etc.	
	9. Trignometry Functions: Degrees, Radians, Cos, Sin, Tan etc	
	10. Database Function: Dsum, Dmax, Dproduct, Dvar, etc.	
	11. Statistical Functions: Counta, Countblank, Count if, Forecast	
	12. Frequency, Information Functions In Blank, Is logical, Info,	
	Cell, Is ref etc	
	13. Engineering Function: Convert, Delta, Gestep, Imreal,	
	Dec2hex Functions etc	
	14. Using Names to work with Ranges Auditing	
Unit-3		11 Hrs
0	1. Advanced Charts	
	2. Advance Pivot Tables	
	3. Logical Functions	
	4. Text Functions	
	5. Date & Time Functions	
	6. Data Validations	
	7. Conditional Formatting	
	8. Financial Functions	
	9. Lookup & Reference Functions	
	10. Hyperlinks, Linking & Embedding	
	11. Import Data	
	12. Database Functions	
	13. Statistical Functions	
	14. Sorting & Filtering Data	
	15. Tracking & Reviewing Changes	
	16. Scenario, Goal seek	
	17. Solver Data table	

Unit-4	<ol> <li>Creating a Macro</li> <li>Running a Macro</li> <li>Editing a Macro</li> <li>Editing a Macro</li> <li>Adding a menu to Menu Bar</li> <li>Adding a Command to Menu</li> <li>Adding Buttons to a Toolbar</li> <li>Data Handling, MIS, EXCEL and Access</li> <li>Macro Generation &amp; Application Design</li> <li>VBA in Excel 2013</li> <li>VBA Programming</li> <li>Macros &amp; VBA Editoe</li> <li>Modifying the Recorded code</li> <li>Projects &amp; Reports</li> <li>Various Examples</li> </ol>	12 Hrs
Reference	1. Excel for Beginners, M.L. Humphrey	
Books	<ol> <li>Excel 2019 Bible, Michael Alexander, Publisher: Wiley, 1st edition</li> <li>Excel 2019 All-in-One For Dummies, Greg Harvey, Publisher: For Dummies, 1st edition</li> <li>Learn Excel 2016 Essential Skills, Mike Smart, Publisher: The Smart Method Ltd</li> </ol>	

1)	Paper Title	Assignments
2)	Paper No	II
3)	Content	At least one assignment should be given on each unit of Paper I: Advanced Excel.

1)	Paper Title	Project
2)	Paper No	III
3)	Content	The project should be based on Excel. In the project work, student is expected
		to carry out the analysis of data. The data may be collected or it already
		available data can also be used. Student should perform analysis using
		graphical, mathematical and statistical tools discussed in Paper I: Advanced
		Excel. A detailed report of the project work should be submitted. Assessment
		will be done based on Project Report.

1)	Paper Title	Practical
2)	Paper No	IV
3)	Content	At least Four Practicals should be conducted on each unit of Paper I: Advanced Excel.