



# SHARDA SCHOOL OF BUSINESS STUDIES



Financial Modelling through Excel (NV20116)

VALUE ADDED COURSE BROCHURE-30 HRS

## **ABOUT THE UNIVERSITY**

Sharda University is a leading educational institution situated in Greater Noida, Delhi NCR. A venture of the renowned Sharda Group of Institutions (SGI), The University has established itself as a high-quality education provider with a prime focus on holistic learning and imbibing competitive abilities in students.

#### **ABOUT THE SCHOOL**

Sharda School of Business Studies believes in preparing students to approach business obstacles and solve them the way established corporations do. Learning happens both inside and outside the classroom; hence, technology plays a big part in the core culture, and so do global exposure, project management, critical reasoning, and business communications skills.

#### **VISION OF THE SCHOOL**

To become a world class institution imparting education based on values, fostering culture of research, innovation and entrepreneurial spirit and exhibiting professional excellence for better and sustainable society.

#### MISSION OF THE SCHOOL

- M1. Building conducive learning ecosystem
- M2. Creating socially responsible future business leaders and entrepreneurs
- M3. Imparting cutting-edge application based curriculum
- M4. Boosting industry-academia connect

### **ABOUT THE COURSE**

The course "Financial Modelling through Excel" (NV20116) is a value-added program designed to introduce M.Com. students to the concept of financial and business modeling using MS Excel, applying the basics to advanced-level tools and other Excel applications. This course provides a practical foundation in financial modeling using Microsoft Excel, focusing on real-world applications in business and finance. Students will learn to build dynamic models for time value of money, capital budgeting, forecasting, valuation, and financial analysis. The course also introduces advanced Excel tools for scenario planning, sensitivity analysis, and risk modeling. Through hands-on exercises and a capstone project, learners will develop the skills to create integrated financial models that support data-driven decision-making in corporate finance, investment analysis, and strategic planning.

## **COURSE SCHEDULE**

Week	Content	Details of Topic Covered	Duration Hrs.
1	Introduction to Financial Modeling	Overview of financial modeling: Purpose, scope, and relevance in business and finance.	3
2	Introduction to Excel interface and functions	Logical, mathematical, and financial formulas.	3
3	Time Value of Money	Concept and calculation of present value, future value, annuities, and perpetuities in Excel.	3
4	Building models for capital budgeting	Payback period, NPV, IRR, and profitability index.	3
5	Business valuation models	Dividend Discount Model (DDM), Discounted Cash Flow (DCF).	3
6	Ratio Analysis	Financial ratio analysis using Excel dashboards: Liquidity, profitability, solvency, and efficiency ratios.	3
7	Scenario, Sensitivity & Risk Analysis	Scenario Manager in Excel. Sensitivity analysis for changes in key variables (cost, revenue, growth rates).	3
8	Integrated financial statement modeling	Linking income statement, balance sheet, and cash flow.	3
9	Advanced Financial Modeling Projects	Building models for M&A analysis, startup financial projections, and working capital management.	3
10	Capstone project	End-to-end development of a financial model based on real-life business data	3
Total			30

# **PROFILES**

### Dr. Deepa Chauhan

Dr. Deepa Chauhan is working as an Assistant Professor in School of Business Studies. She is a passionate educationist with a strategic focus. She is educator, academician, having more than 10 years of experience in respective fields. Dr. Deepa Chauhan holds a Ph.D. degree in Management with MBA (Finance). She has published 15 papers in international & national journals. She has attended & participated in many conferences, workshops, symposium etc. She has been an initiator of several developments programs for students and faculty. She has also published papers in UGC care, Web of science and Scopus indexed journals.

# **Course Module**

School: SSBS	Л	Batch : 2024-26 Current Academic Year: 2025-26			
Program: M.COM Branch:		Semester: III			
1. Course Code	NV20116				
2. Course Title		odelling through Excel			
3. Credits Audit Course					
4. Contact Hours (L-T-P) 30 Hours					
Course Type Value ad		d course			
<b>5.</b> Course Objective	<ol> <li>The objective of this course is to introduce the concept of financial and business modeling using MS Excel, applying the basics to advanced-level tools and other Excel applications. The Excel-based financial modeling skills you will learn in this course include advanced financial functions, charting techniques, and the use of the financial calculator function</li> <li>Explain the fundamentals of financial modeling, including its purpose, scope, and practical applications in business and finance, along with proficiency in basic Excel functions and templates.</li> <li>To construct Excel-based models to compute time value of money and perform capital budgeting techniques such as NPV, IRR, and Payback Period.</li> <li>To analyze financial data by forecasting revenues and costs, valuing businesses using DCF and other models, and performing ratio analysis through Excel dashboards.</li> <li>To evaluate financial decisions under uncertainty using scenario and sensitivity analysis, and assess risk using Monte Carlo simulation tools in Excel.</li> <li>To design and develop integrated financial models that connect financial statements and support strategic business decisions such as mergers, startups, or working capital planning through a capstone project.</li> <li>Utilize advanced Excel features including financial functions, dynamic charting, and financial calculators to enhance model functionality and visualization in financial reporting and decision-making.</li> </ol>				
<b>6.</b> Course Outcomes	<ul> <li>After completion of the course, learners will be able to:</li> <li>CO1: Recall basic financial concepts and Excel functions essential for financial modeling, including time value of money, depreciation methods, and financial ratios.</li> <li>CO2: Explain the logic behind commonly used financial models and interpret the outputs generated in Excel-based simulations.</li> <li>CO3: Apply Excel tools (like formulas, data tables, charts, pivot tables) to construct simple financial models for personal finance, project evaluations, and forecasting.</li> <li>CO4: Analyze and interpret financial data by creating scenario and sensitivity models to aid managerial decision-making.</li> <li>CO5: Evaluate the financial viability of business projects using Excel models like NPV, and IRR</li> <li>CO6: Design and construct integrated financial models by applying scenario, sensitivity, and risk analysis tools to solve complex, real-life business problems.</li> </ul>				
7. Course Description  8. Outline syllabus	This course provides a practical foundation in financial modeling using Microsoft Excel, focusing on real-world applications in business and finance. Students will learn to build dynamic models for time value of money, capital budgeting, forecasting, valuation, and financial analysis. The course also introduces advanced Excel tools for scenario planning, sensitivity analysis, and risk modeling. Through hands-on exercises and a capstone project, learners will develop the skills to create integrated financial models that support data-driven decision-making in corporate finance, investment analysis, and strategic planning.				
Unit 1	Introduction	to Financial Modeling & Excel Basics	CO Mapping		
A		nancial modeling: Purpose, scope, and relevance in business and finance.	CO1		
В	Introduction to	o Excel interface and functions: Logical, mathematical, and	CO1		
С	Basic template	s: Personal budget, loan amortization schedule, and owth modeling.	CO1		
Unit 2		Money & Capital Budgeting Models			
A B	·	alculation of present value, future value, annuities, and perpetuities in Excel.	CO2		
С		els for capital budgeting: Payback period, NPV, IRR, and profitability index.  using Excel-based decision models for project evaluation,	CO2		
Unit 3		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
A	Valuation & R  Business valua	tion models: Dividend Discount Model (DDM), Discounted Cash Flow (DCF),	CO3		
В	P/E ratio-based		CO3		
С	Financial ratio	analysis using Excel dashboards: Liquidity, profitability, solvency, and efficiency ratios.	CO3		
Unit 4	Scenario, Sen	sitivity & Risk Analysis			
А	Data tables, Go	pal Seek	CO4, CO6		
В	Scenario Mana		CO4		
С	Sensitivity ana	lysis for changes in key variables (cost, revenue, growth rates).	CO4		
Unit 5	Advanced Fin	ancial Modeling Projects			
A	-	ncial statement modeling: Linking income statement, balance sheet, and cash flow.	CO5		
<u>В</u> С	-	els for M&A analysis, startup financial projections, and working capital management.  ect: End-to-end development of a financial model based on real-life business data.	CO5 CO6		
Mode of examination	Assignments/ Continuous As		Coo		
Text book/s	1. Sengupta, (	C. (2010). Financial analysis and modeling using Excel and VBA (2nd ed.). Wiley.			
Other References	2. Benninga, S. 3. Day, A. (2012 4. Fairhurst, J. ( 5. Whigham, D	cel 2016: Data Analysis and Business Modeling by Winston, Wayne L., PHI Learning Pvt Ltd (2014). Financial modeling (4th ed.). MIT Press ISBN: 9780262027281 2). Mastering financial mathematics in Microsoft Excel (3rd ed.). FT Press. ISBN: 9780273768173 2015). Financial modeling in Excel for dummies. Wiley. ISBN: 9781119062430 . (2007). Business data analysis using Excel. Oxford University Press. ISBN: 9780199296288 ta Analysis using Excel By Whigham David, Oxford University Press			