



SHARDA
UNIVERSITY
Beyond Boundaries



**SHARDA SCHOOL OF
BUSINESS STUDIES**



COURSE

Financial Modelling Techniques for Business Applications (NV 20102)

VALUE ADDED
COURSE BROCHURE-30 HRS
2026-27

Vision and Mission of the School

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 UNIVERSITY

Sharda University is a leading Educational institution based out of 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 imbining competitive abilities in students.

Course Articulation Matrix

P0s C0s	P01	P02	P03	P04	P05	P06	PS0(1)	PS0(2)	PS0(2)
C01	2	-	-	1	2	2	1	1	1
C02	-	3	1	1	2	1	-	1	1
C03	2	2	1	1	-	1	1	1	-
C04	2	3	1	-	1	2	1	-	1
C05	1	2	-	2	1	-	1	1	1
Co6	3	-	2	-	3	3	-	3	3

1-Slight (Low)

2-Moderate (Medium)

3-Substantial (High)

ABOUT 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.

ABOUT COURSE

The course '**Financial Modelling Techniques for Business Applications**' (NV20102) provides a practical foundation in financial modelling 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 emphasizes the use of financial models as decision-support tools for managers, investors, and entrepreneurs. It introduces advanced Excel tools for scenario planning, sensitivity analysis, and risk modelling. Through hands-on exercises and a capstone project, learners will develop the skills to create integrated financial models that generate actionable insights for business decision-making in areas such as investment, operations, and strategy.

COURSE SCHEDULE

Week	Content	Details of Topic Covered	Duration Hrs.
1	Introduction to Financial Modelling & Excel Basics	Overview of financial modelling: Purpose, scope, and relevance in business and finance. Introduction to Basic Excel.	3
2	Basic Templates	Decision-oriented templates: budgeting, loan decisions, and investment planning models.	3
3	Time Value of Money & Capital Budgeting Models	Concept and calculation of PV, FV, annuities, perpetuities. Capital budgeting models: Payback, NPV, IRR : (Decision rules and managerial interpretation of results).	3
4	Case Exercises	Real-life business decision scenarios using Excel models.	3
5	Valuation & Ratio Analysis	Business valuation models: Dividend Discount Model (DDM), Discounted Cash Flow (DCF). P/E ratio-based valuation. (Comparative decision-making across firms and industries).	3
6	Financial ratio analysis using dashboards	Liquidity, profitability, solvency, and efficiency ratios. (Interpretation for managerial performance evaluation and decision-making).	3
7	Scenario, Sensitivity & Risk Analysis	Data tables, Goal Seek, Scenario Manager in Excel (Strategic planning under multiple business scenarios).	3
8	Sensitivity Analysis	Sensitivity analysis for changes in key variables (cost, revenue, growth rates); (Identifying key drivers affecting business decisions).	3
9	Advanced Financial Modeling Projects	Integrated financial statement modeling: Linking income statement, balance sheet, and cash flow.	3
10	Capstone Project	End-to-end financial model with managerial decision recommendations based on analysis.	3

PROFILES

DrVikas Bhargaw:

He is a Doctorate alumnus of Guru Jambheshwar University of Science and Technology, Hisar. He has completed MBA from M.D.U., Rohtak, whereas M. Com from GJUS&T, Hisar. He is five times NET and JRF qualified for Commerce (2 Times) and Management (3 Times), both disciplines. He is having 20 years of vast experience in the field of teaching to management students at UG and PG courses at college and university level. He has been associated as a member of PGBOS, at Ch. Devi Lal University, Sirsa and Om Sterling Global University, Hisar. His thrust area of research is corporate finance. I have published lots of research papers in various areas of corporate finance such as dividend practices, capital structure, financial theories etc. He has published more than 20 research papers in various national and international journals of high repute. He has also presented many research papers in various national and international conferences. He has guided many PhD scholars from Management stream during his tenure at Om Sterling Global University, Hisar. His professional outlook and strong will power makes him stand unique and his able leadership has always put the department ahead in every sphere of student learning. He is also highly active in the social welfare activities as he is an active member of NGO's such as Paryatan - Hisar, Spread Smile Foundation – Sonipat etc.

School: SSBS Programme: M.Com Branch:	Batch : 2025-27 Current Academic Year: 2026-27 Semester: III
--	---

1. Course Code	NV20102
2. Course Title	Financial Modelling Techniques for Business Applications
3. Credits	Audit Course
4. Contact Hours (L-T-P)	30 Hours
Course Type	Value added course
5. Course Objective	The objective of this course is to introduce the concept of financial and business modelling using MS Excel, with a strong focus on supporting managerial and strategic decision-making in real-world business environments. The Excel-based financial modelling skills include advanced financial functions, charting techniques, and analytical tools. 1. Explain the fundamentals of financial modelling, including its purpose, scope, and practical applications in business and finance, particularly in managerial decision-making contexts such as investment, pricing, and resource allocation. 2. Construct Excel-based models to compute time value of money and perform capital budgeting techniques such as NPV, IRR, and Payback Period to support investment decisions. 3. Analyze financial data by forecasting revenues and costs, valuing businesses using DCF and other models, and generating insights for strategic business decisions. 4. Evaluate financial decisions under uncertainty using scenario and sensitivity analysis, and assess risk using simulation tools in Excel to improve decision quality under different business conditions. 5. Design and develop integrated financial models that connect financial statements and support strategic business decisions such as mergers, startups, or working capital planning with emphasis on managerial recommendations. 6. Utilize advanced Excel features including financial functions, dynamic charting, and dashboards to communicate financial insights effectively to decision-makers.
6. Course Outcomes	After successful completion of this course, students would be able to: C01: Recall basic financial concepts and Excel functions essential for financial modeling. C02: Explain the logic behind commonly used financial models and their relevance in business decision-making situations. C03: Apply Excel tools to construct financial models for real-world business problems such as pricing, budgeting, and investment analysis. C04: Analyze and interpret financial data by creating scenario and sensitivity models to support managerial decision-making under uncertainty. C05: Evaluate the financial viability of business projects using Excel models like NPV and IRR and recommend appropriate business actions. C06: Design and construct integrated financial models that aid strategic planning and decision-making in corporate and entrepreneurial settings.
7. Course Description	This course provides a practical foundation in financial modelling 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 emphasizes the use of financial models as decision-support tools for managers, investors, and entrepreneurs. It introduces advanced Excel tools for scenario planning, sensitivity analysis, and risk modelling. Through hands-on exercises and a capstone project, learners will develop the skills to create integrated financial models that generate actionable insights for business decision-making in areas such as investment, operations, and strategy.

8. Outline syllabus		CO Mapping
Unit 1	Introduction to Financial Modeling & Excel Basics	
A	Overview of financial modeling: Purpose, scope, and relevance in business and finance	CO1
B	Introduction to Excel interface and functions	CO1
C	Basic templates: Decision-oriented templates: budgeting, loan decisions, and investment planning models	CO1
Unit 2	Time Value of Money & Capital Budgeting Models	
A	Concept and calculation of PV, FV, annuities, perpetuities	CO2
B	Capital budgeting models: Payback, NPV, IRR : (Decision rules and managerial interpretation of results)	CO2
C	Case exercises: Real-life business decision scenarios using Excel models	CO2
Unit 3	Valuation & Ratio Analysis	
A	Business valuation models: Dividend Discount Model (DDM), Discounted Cash Flow (DCF)	CO3
B	P/E ratio-based valuation. (Comparative decision-making across firms and industries)	CO3
C	Financial ratio analysis using dashboards: Liquidity, profitability, solvency, and efficiency ratios. (Interpretation for managerial performance evaluation and decision-making)	CO3
Unit 4	Scenario, Sensitivity & Risk Analysis	
A	Data tables, Goal Seek (What-if analysis for business decision alternatives)	CO4, CO6
B	Scenario Manager in Excel (Strategic planning under multiple business scenarios)	CO4
C	Sensitivity analysis for changes in key variables (cost, revenue, growth rates); (Identifying key drivers affecting business decisions)	CO4
Unit 5	Advanced Financial Modeling Projects	
A	Integrated financial statement modeling: Linking income statement, balance sheet, and cash flow.	CO5
B	Building models for startup financial projections	CO5
C	Capstone project: End-to-end financial model with managerial decision recommendations based on analysis	CO6
Mode of examination	Assignments/ Quizzes	
Text book/s*	1. Sengupta, C. (2010). Financial analysis and modelling using Excel and VBA (2nd ed.). Wiley.	
Other References	References: 1. Microsoft Excel 2016: Data Analysis and Business Modelling by Winston, Wayne L., PHI Learning Pvt Ltd 2. Benninga, S. (2014). Financial modelling (4th ed.). MIT Press.. ISBN: 9780262027281 3. Day, A. (2012). Mastering financial mathematics in Microsoft Excel (3rd ed.). FT Press. ISBN: 9780273768173 4. Fairhurst, J. (2015). Financial modelling in Excel for dummies. Wiley. ISBN: 9781119062430 5. Whigham, D. (2007). Business data analysis using Excel. Oxford University Press. ISBN: 9780199296288 6. Business Data Analysis using Excel By Whigham David, Oxford University Press	