FINANCIAL MODELLING

IV Semester: MBA

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	**T**	**P**	**C**	**CIA**	**SEE**	**Total**
CMB420	**Elective**	3	-	-	3	30	70	100
Contact Classes: 45	**Tutorial Classes: Nil**	**Practical Classes: Nil**				**Total Classes: 45**		

OBJECTIVES:

The course should enable the students to:
I. Understand the basic features and functions in excel.
II. Apply models in different areas of finance including investments.
III. Emphasize the concepts of corporate finance and derivatives.
IV. Identify the risk which can be built in the model to enhance decision making process.
V. Gain knowledge in the advantage of financial modeling using VBA.

COURSE OUTCOMES:

1. Ability to understand the financial modeling in excel, understanding advanced features of excel database functions in excel, creating charts, using forms and control tool box .
2. Understand the finance functions present in excel by creating dynamic models.
3. Create an awareness for students about the present scenario of manager and sensitivity analysis features.
4. Examine different statistical distributions used in simulation generating random numbers that follow a particular distribution, building models in finance using simulation.
5. Use excel sheet to prepare common size statements directly from trial balance and also forecasting the financial statements.
6. Analyze the risk in project appraisal, simulation in project appraisal; excel in valuation, determination of value drivers, discontinued cash flow valuation, risk analysis in valuation
7. Determine efficient portfolio, creating dynamic portfolios, portfolio insurance and fixed income portfolio management using excel.
8. Demonstrate the excel in derivatives black and schools model, Greeks in excel, real options valuation and building a mega model.
9. Categorize how to make decision rules, message box and input box, debugging in excel for preparing financial statements.
10. Interpret the recording and editing macros, subroutines and functions in excel.
11. Explain how to design an advanced financial models using visual basic application user forms.

UNIT-I	UNDERSTANDING THE BASIC FEATURES OF EXCEL	Classes: 09

Introduction to modeling, introduction to excel, understanding advanced features of excel database functions in excel, creating charts, using forms and control toolbox, understanding finance functions present in excel, creating dynamic models.

UNIT-II	SENSITIVITY ANALYSIS USING EXCEL	Classes: 09

Scenario manager, other sensitivity analysis features, simulation using excel different statistical distributions used in simulation generating random numbers that follow a particular distribution, building models in finance using simulation.

UNIT-III	EXCEL IN ACCOUNTING	Classes: 09

Preparing common size statements directly from trial balance, forecasting financial statements using excel, analyzing financial statements by using spreadsheet model, excel in project appraisal, determining project viability.

Risk analysis in project appraisal, simulation in project appraisal, excel in valuation, determination of value drivers, discontinued cash flow valuation, risk analysis in valuation.

UNIT-IV	EXCEL IN PORTFOLIO THEORY	Classes: 09

Determining efficient portfolio, creating dynamic portfolios, portfolio insurance, fixed income portfolio management using excel, excel in derivatives black and schools model in excel, Greeks in excel, real options valuation, building a mega model.

UNIT-V	UNDERSTANDING SUBROUTINES AND FUNCTIONS AND BUILDING SIMPLE FINANCIAL MODELS USING SUBROUTINES	Classes: 09

Recording and editing macros, subroutines and functions, decision rules, message box and input box, debugging, designing advanced financial models using visual basic application user forms, other advanced features, actual model building.

Text Books:

1. S. Benninga, "Financial Modeling", 2nd edition.
2. Francis J. Clauss ,"Financial Modeling with Excel" , (revised May 2006)

Reference Books:

1. S. Christian Albright, "VBA for Modelers", 2nd edition.
2. C. Sengupta," Financial Modeling Using Excel and VBA".
3. J. Walkenbach,"Excel 2003 Power Programming with VBA".

Web References:

1. http://www.aazea.com/book/financial-modeling-and-valuation-a-practical-guide/
2. https://www.bpmglobal.com/files/downloads/training/fmf/Financial%20Modelling%20Fundamental s.pdf

E-Text Books:

1. http://files.leopolds.com/books/Financial.Modeling.4th.Edition.2014.Benninga.pdf
2. http://160592857366.free.fr/joe/ebooks/Corporate%20Finance/Wiley%20Advanced%20Modelling% 20in%20Finance%20using%20Excel%20and%20VBA.pdf