

PROGRAM	Bachelors of Commerce (Hons)
SEMESTER	VI
COURSE TITLE	Financial Modeling in Excel
COURSE CODE	04CH0661
COURSE CREDITS	04
COURSE DURATION	48 Hrs (48 sessions of 60 minutes each)

COURSE OUTCOMES:

- To apply various finance functions in MS Excel
- To prepare the models for financial statement analysis and advanced risk analysis models in capital budgeting
- To do valuation of securities by using modeling utilities of MS Excel
- To create valuation models of Business organizations by using modeling utilities of MS Excel
- To evaluate portfolio performance by using optimization tools of MS Excel

Teaching and Examination Scheme

Teaching Scheme (Hours)			Credits	Internal Marks (50%)		End-Semester Examination (50%)			Total Marks
Theory	Tutorial	Practical		IA	CSE	Theory	Practical/Viva	Term Work (TW)	
4	0	0	4	30	20	50	0	0	100

Course Contents:

Unit No	Unit / Sub Unit	Sessions
I	Finance Functions in Excel: Time value of money functions; Bond Functions; capital budgeting functions; Descriptive statistics for Risk and return, loan functions (excel functions related to loans); loan amortization schedule	8
II	Financial Statement Analysis: Trend analysis; comparative statement analysis; Prospective statements; Du-pond analysis; Profitability ratios; Liquidity Ratios; Solvency ratios; Efficiency ratios; Altman Z score; ROCE-ROE Analysis Models for Risk analysis in capital Budgeting: Sensitivity analysis; Scenario analysis; stimulation analysis; BEP analysis, Hillier Model; Decision making tree analysis	10

III	Security Valuation in Excel: Shares: Net assets value Method; PE-PB Model; Dividend discount model (Two stage-three stage); Debentures & Bond: valuation by DCF, Derivative pricing: Binomial model; Black & Scholes; Option Greeks	12
IV	Business Valuation in Excel: Comparable company analysis; Precedent transactions; DCF Model; Exchange Ratio in M&A	8
V	Portfolio Optimization & Performance Measurement: Portfolio risk & Return; Value at Risk; Weighted portfolio variance; Efficient frontier; return based performance measurement; Sharpe ratio; Treynor ratio; Jensen's alpha; tracking error and estimation ratio; Drawdown & Sortino Ratio; Brinson-Hood-Bee bower Model for equity; 3-Factor Model for Fixed Income	10

SUGGESTED READINGS:

Text Books:

Sr. No	Author/s	Name of the Book	Publisher	Edition & Year of Publication
T-01	Alastair Day	Mastering Financial Modelling in Microsoft Excel	Pearson	3 rd Edition- 2016

Reference Books:

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year of Publication
R-01	Financial Modelling in Practice: A Concise Guide for Intermediate and Advanced Level	Financial Modelling in Practice: A Concise Guide for Intermediate and Advanced Level	Wiley Finance	1 st Edition-2012
R-02	Chandan Sengupta	Financial Analysis and Modeling using Excel and VBA	Wiley Finance	1 st Edition-2021