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| **PROGRAM** | **Master of Business Administration (Business Analytics)** |
| **SEMESTER** | **III** |
| **COURSE TITLE** | **Financial Analytics** |
| **COURSE CODE** | **04MB0366** |
| **COURSE CREDITS** | **3** |
| **COURSE DURATION** | **42 Hours** |

**COURSE OUTCOMES:**

* Apply the analytical tools and techniques on the finance data.
* Apply and Analyze finance functions and quantitative measures for analyzing risk and return aspects.
* Applying correlation and regression in analyzing the finance data.
* Implement multiple regression models to financial forecasting.
* Apply various time series models in predicting share prices.

**Course Contents:**

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| **Unit No** | **Unit / Sub Unit** | **Sessions** |
| I | **Financial Analytics**:  Meaning, Analytics and The Scientific Method in Finance, Financial Models, Empirical studies and research in Finance. Introduction to various software for Financial Data Analysis – Excel (MS Office), SPSS, EViews  (Focused on concept building (T-2, R-1) | 8 |
| II | **Quantitative Fundamentals for Investment:**  **Analysis Discounting of Cash Flows & it’s Application:** Interest rate fundamental, FV & PV, for single amount and for Annuities, computation of number of period and interest rate, NPV, IRR, Portfolio returns.  **Statistics and Market return:** Introduction, Nature of statistics, population and sample, measurement and scale, graphical presentation of data, measure of central tendency, Quantiles, Measurement of dispersion. Symmetry, skewness and kurtosis in return distribution (Two Class-room lectures and seven sessions for hands-on experience in Excel and SPSS.) | 9 |
| III | **Investment Analysis – Application of Correlation and Regression:**  Correlation Analysis for Investment Analysis: Scatter plot, Calculation and interpretation, limitation, Usage, Significance (Case 1 Example: Analyzing relationship between Large cap and Market Index (T-1). Using Excel/SPSS/EViews) | 9 |
| IV | **Financial Forecasting & Multiple Regression:**  Introduction, Assumption, predicting dependent variable, Testing the equality of population regression coefficient to be zero, Using dummy variable, violation of assumption, Models with quantitative dependent variable in Finance (Case 2: Impact of currency rate changes and Domestic equity market returns on portfolio return (T -1) Case 3: Neglected Company Effect (T -1). Using Excel/SPSS/EViews) | 8 |
| V | **Predictive Analysis:**  Introduction, Challenges, Trend Model, Autoregressive Time series model, Random Walk and unit roots, Moving average time series model, seasonality in time series model, Auto regressive moving average model, Regression with more than one time series. (Case 4 Example: Quarterly sales analysis of Cisco Using Time series Model (T -1). Using Excel/SPSS/EViews) | 8 |

**Evaluation:**

The students will be evaluated on a continuous basis and broadly follow the scheme given below:

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|  | **Component** | **Weight age** |
| A | Continuous Evaluation Component (Assignments / Presentations/ Quizzes / Class Participation/ etc.) | 20% (C.S.E.) |
| B | Internal Assessment - Practical Exam | 30% (I.A.) |
| C | End-Semester Examination (Practical/Viva) | 50% (External Assessment)- (Practical/Viva) |

**SUGGESTED READINGS:**

**Text Books:**

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| **Sr. No** | **Author/s** | **Name of the Book** | **Publisher** | Edition & Year of  Publication |
| **T-01** | Richard A. De Fusco | Quantitative Investment Analysis | Wiley | 3rd Edition 2012 |
| **T-02** | Chris Brooks | Introductory Econometrics for Finance | Cambridge | 4th Edition 2019 |

**Reference Books:**

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| **Sr. No** | **Author/s** | **Name of the Book** | **Publisher** | Edition and Year of  Publication |
| **R-01** | John N Teall | Financial Market Analyst | Greenwood | 2nd Edition |
| **R-02** | Mark J mark Joseph Bennett | Financial Analytics | Cambridge University Press | 1st Edition |