Name of the Program: BBA

Course Code: BBA 4.2.1

Name of the Course: BUSINESS ANALYTICS

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs.	56 Hrs.

Pedagogy: Classroom lectures, Tutorials, and Problem Solving.

Course Outcomes: On successful completion of the course, the Students will able to:

- Understand types of analytics and data models
- Understand the role of data indecision making, sources and types of Data.
- Ability to analyse data using different data analytic tools and draw inferences.
- Understand applied statistics for business problems.
- Demonstrate visualization of data.

Syllabus:	Hours
Module No. 1: Introduction to Business Analytics	**12**

Business Analytics, Terminologies used in Analytics: Business Analytics, Business Intelligence, Meaning, Importance, Scope, Uses of Business Analytics, Architecture of Business Analytics, Types of Analytics: Descriptive, Diagnostics, Predictive, Prescriptive, Application of Business analytics, Introduction to Data Science and Big Data.

Module No. 2: Role of Data in The Organization	**10**

Sources of data, Use of Data in Decision making, Importance of data quality, dealing with missing or incomplete data, Types of Digital Data- Structured, Semi Structured, Unstructured Data. Data warehouse, Data mining, Data Integration – What, need, advantages, approaches of Data integration, Data profiling.

Module No. 3: Tools Used for Data Analytics	**11**

Introduction to data analytics software – Types of data analytics software – open source and proprietary software.

Lab sessions:

R, JAMOVI, GRETL, Python: Installation of software –Installation of packages / library -Importing of data – Saving of data – Run descriptive Statistics – Interpret result – plotting of charts – inferences of chart. (Using all the four specified softwares).

Module No. 4: Database Orientation	**12**

Database definition, types of structures, DBMs, RDBMS, Relational Database Language, Introduction to SQL, Features of SQL, SQL Languages, DDL commands- Create, Add, Drop, Constraints in SQL, DML Commands – Insert, Delete, Update, Data Query

Language – Where clause, Order by, Group by, DCL commands – Grant, Revoke, TCL Commands – Commit, Roll Back, Save point. Aggregate Functions, Relational Algebra.

Module No. 5: Data Visualization Using Tableau (Public Version)	**10**

Introduction to Dimensions and measures, Types of Charts, (Pie Chart, Column Chart, Line Chart, Bar Chart, Area Chart, Scatter Chart, Bubble Chart, Stock Chart), Basic understanding in dashboard and storyboard. (Explain using practical examples and students executes the examples using tableau.)

Skill Developments Activities:

1. Prepare tree map chart using Tableau.
2. Run a descriptive statistic using R and Python software.
3. Execute a summary chart in JAMOVI.
4. Execute DCL and TCL Command in SQL.

Text Books:

1. Business Analytics: Text and Cases, Tanushri Banerjee, Arvindram Banerjee, Publisher: Sage Publication
2. Business Analytics, U Dinesh Kumar, Publication: Wiley
3. Business Analytics, R. Evans James, Publisher: Pearson
4. Fundamental of Business Analytics, Seema Acharya R N Prasad, Publisher: Wiley
5. Business Analytics: Data Analysis and Decision Making, Albright and Winston published by Cengage Learning.
6. Swain Scheps, Business Intelligence for Dummies.
7. Rick Sherman, Business Intelligence Guidebook: From Data Integration to Analytics
8. Cindi Howson. Successful Business Intelligence, Second Edition: Unlock the Value ofBI & Big Data
9. Seema Acharya R N Prasad, Fundamentals of Business Analytics, 2ed, Wile

Note: Latest edition of text books may be used.