**Syllabus for Master of Business Administration, 2nd Semester**

**Subject Name: Business Analytics (BA) Subject Code: 452920**

**With effective from academic year 2018-19**

# Learning Outcomes:

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| --- | --- |
| **Learning Outcome Component** | **Learning Outcome** |
| Business Environment and Domain Knowledge (BEDK) | * Develop domain knowledge of various technology and its application to facilitates managerial decision /MIS |
| Critical thinking, Business  Analysis, Problem Solving and Innovative Solutions (CBPI) | * Enhance capabilities for innovative use of I.T. |
| Global Exposure and Cross- Cultural Understanding (GECCU) | * Understanding the significance of global platform for data retrieval/process among different business   cultures of the world |
| Social Responsiveness and Ethics (SRE) | * Understanding of ethics and prevention of fraud through technology, theft of data etc. |
| Effective Communication (EC) | * Enable communication for data driven decision making |
| Leadership and Teamwork (LT) | * Encourage cross functional collaboration to enhance efficiency and productivity. |

1. **Course Duration:** The course duration is of **40 sessions of 60 minutes each.**

# Course Contents:

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| --- | --- | --- | --- |
| **Module No:** | **Module Content** | **No. of Sessions** | **70 Marks (External**  **Evaluation)** |
| **I** | **Business Intelligence:**   * Definitions and Examples in Business Intelligence * Need, Features and Use of Business Intelligence (BI) * BI Components   + Data Warehouse   + Business Analytics   + Business Performance Management   + User Interface   **Business Analytics:**   * Introduction to Business Analytics (BA) – Need. * Components (Business Context, Technology, Data Science). * Types (Descriptive, Predictive and Prescriptive). * Business Intelligence versus Business Analytics. * Transaction Processing v/s Analytic Processing   + OLTP v/s OLAP   + OLAP Operations   + Data models for OLTP (ER model) and OLAP   (Star & Snowflake Schema) | 10 | 18 |
| **II** | **Types of Digital Data:**   * Definition, Sources, Storage and Characteristics of Structured, Unstructured and Semi Structured Data   **Data Warehouse:**   * Definition, characteristics, framework | 10 | 18 |
|  | * Data lake   **Business Reporting, Visual Analytics:**   * Definition, concepts * Different types of charts and graphs * Emergence of data visualization and visual analytics |  |  |
| **III** | **Data Mining:**   * Concepts and applications * Data mining process   **Text & Web Analytics:**   * Text analytics and text mining overview * Text mining applications * Web mining overview * Social media analytics * Sentiment analysis overview   **Big Data Analytics:**   * Definition and characteristics of big data * Fundamentals of big data analytics | 10 | 17 |
| **IV** | **Business Performance Management:**   * Business performance management cycle * KPI, Dashboard   **Analytics in Business Support Functions:**   * Sales & Marketing Analytics * HR Analytics * Financial Analytics * Production and operations analytics   **Analytics in Industries:**   * Telecom, Retail, Healthcare, Financial Services | 10 | 17 |
| **V** | **Practical:**  Students should prepare a detailed report on applications of analytics in different industries. | --- | (30 marks CEC) |

1. **Pedagogy:**
   * ICT enabled Classroom teaching
   * Case study
   * Practical / live assignment
   * Interactive class room discussions

# Evaluation:

Students shall be evaluated on the following components:

|  |  |  |
| --- | --- | --- |
| **A** | **Internal Evaluation** | **(Internal Assessment- 50 Marks)** |
| * Continuous Evaluation Component | 30 marks |
| * Class Presence & Participation | 10 marks |
| * Quiz | 10 marks |
| **B** | **Mid-Semester examination** | **(Internal Assessment-30 Marks)** |
| **C** | **End –Semester Examination** | **(External Assessment-70 Marks)** |

# Reference Books:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Author** | **Name of the Book** | **Publisher** | **Year of Publication /**  **Edition** |
| 1 | Ramesh Sharda, Dursun Delen, Efraim Turban | Business Intelligence: A Managerial Perspective on  Analytics | Pearson | 3rd |
| 2 | R.N.Prasad and Seema  Acharya | Fundamentals of  Business Analytics | Wiley | 2016 |
| 3 | U. Dinesh Kumar | Business Analytics – The Science of Data Driven Decision  Making | Wiley | 2017 |
| 4 | Anil Maheshwari | Data Analytics | McGraw Hill | 2017 |
| 5 | Jesper Thorlund & Gert  H.N. Laursen | Business Analytics for Managers: Taking Business Intelligence  Beyond | Wiley | Latest |
| 6 | Sahil Raj | Business Analytics | Cengage | Latest |
| 7 | James R. Evans | Business Analytics | Pearson | Latest |

Note: Wherever the standard books are not available for the topic appropriate print and online resources, journals and books published by different authors may be prescribed.

# List of Journals / Periodicals / Magazines / Newspapers / Web resources, etc.

1. International Journal of Business Analytics
2. International Journal of Business Analytics and intelligence
3. International Journal on Consumer and Business Analytics
4. Analytics India – Magazine