**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:

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

# Course Contents:

|  |  |  |  |
| --- | --- | --- | --- |
| **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 onAnalytics | Pearson | 3rd |
| 2 | R.N.Prasad and SeemaAcharya | Fundamentals ofBusiness Analytics | Wiley | 2016 |
| 3 | U. Dinesh Kumar | Business Analytics – The Science of Data Driven DecisionMaking | Wiley | 2017 |
| 4 | Anil Maheshwari | Data Analytics | McGraw Hill | 2017 |
| 5 | Jesper Thorlund & GertH.N. Laursen | Business Analytics for Managers: Taking Business IntelligenceBeyond | 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