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| **PROGRAM** | **Master of Business Administration (Business Analytics)** |
| **SEMESTER** | **3** |
| **COURSE TITLE** | **Business Intelligence** |
| **COURSE CODE** | **04MB0368** |
| **COURSE CREDITS** | **03** |
| **COURSE DURATION** | **42 Hours (42 sessions of 60 minutes each)** |

**COURSE OUTCOMES:**

* Identify the major frameworks of computerized decision support: decision support systems (DSS), data analytics and business intelligence (BI).
* Integrate the definitions, concepts, and architectures of data warehousing.
* Evaluate how analytics are powering consumer applications and creating a new opportunity for entrepreneurship for analytics.
* Evaluate the concepts and enabling technologies of big data analytics.
* Analyze and assess consumer behavior and its influence on firm and household decisions.

**COURSE CONTENTS:**

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| **Unit No** | **Unit / Sub Unit** | **Sessions** |
| **I** | **Overview of Business Intelligence:** Framework for Business Intelligence (BI), (Definitions of BI , Brief History of BI ,The Origins and Drivers of BI), Successful BI Implementation, (Typical BI user community, Security and Protection of Privacy , Integration of Systems and Applications).  Case : Sabre Helps its Clients Through Dashboards and Analytics  Case : Siemens reduces cost with the use of Data Visualization. | **08** |
| **II** | **Data Warehousing :** Data Warehousing Definitions and Concepts, (What is a Data Warehouse, A Historical Perspective to Data Warehousing, Characteristics of Data Warehousing, Data Marts.), Data Warehousing Process Overview, Data Warehouse Development, (Data Warehouse Development Approaches, Additional Data Warehouse Development Considerations, Representation of Data in Data Warehouse, OLAP versus OLTP , OLAP Operations.)  Case: BP Lubricants Achieves BIGS Success  Case: AARP Transforms Its BI Infrastructure and Achieves a 347% ROI in three years. | **10** |
| **III** | **Text and Web Analytics:**  **Text Analytics and Text Mining Overview:** Text Mining, Applications, (Marketing Applications, Security Applications, Biomedical Applications Academic Applications), Text Mining Process, (Establish the Corpus, Create the Term-Document Matrix, Exact the Knowledge)  **Sentiment Analysis:** Sentiment Analysis Applications, Sentiment Analysis Process, Methods for Polarity Identification, Using a Lexicon, Using a collection of training documents, Identifying Semantic Orientation of sentences, Phrases, and Document.  **Social Analytics:** Social Network Analysis, Social Network Analysis Metrics, Connections, Distributions, Segmentation, Social Media Analytics, Measuring the Social Media, Impact, and Best Practices.  **Web Analytics:** Web Analytics Metrics, Web Site Usability, Traffic Sources, Visitor Profiles, Conversion Statistics  Case: Insurance Group Strengthens Risk Management with Text Mining Solution.  Case: Bringing the Customer into the Quality Equation: Lenovo Uses Analytics to Rethink Its Redesign. | **10** |
| **IV** | **Data Mining Process & Methods**  Data Mining Concepts and Applications , Definitions , Characteristics and Benefits , Data Mining Applications, Data Mining Process : Step 1: Business Understanding , Step 2: Data Understanding , Step 3: Data Preparation , Step 4: Model Building , Step 5: Testing and Evaluation , Step 6: Deployment .  Data Mining Methods : Classification Models , Cluster Analysis for Data Mining , Association Rule Mining .  Case: Visa is enhancing the Customer Experience while Reducing Fraud.  Case: Data Mining Helps Stop Terrorist Funding. | **08** |
| **V** | **Future Trends and Managerial Considerations in Analytics**  Internet of Things , IoT Technology Infrastructure, RFID Sensors , Fog Computing , IoT Platforms , IoT Start-Up Ecosystem , Managerial Considerations in IoT , Cloud Computing and Business Analytics, Data as a Service (DaaS) ,Software as a Service(SaaS),Platform as a Service(PaaS), Infrastructure as a Service(IaaS) , Essential Technologies for Cloud Computing , Cloud Deployment Models , Analytics as a Service (AaaS).  Case: Gulf Air Uses Big Data to Get Deeper Customer Insight.  Case: Machine Learning to Predict School Dropouts. | **06** |

**Evaluation:**

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

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|  |  | Weight age |
| A | Continuous Evaluation Component (Assignments / Quizzes / Class Participation etc.) | 20% (CEC) |
| B | Internal Assessment | 30% (I.A.) |
| C | End-Semester Examination | 50% (External Assessment) |

**SUGGESTED READINGS:**

**Text Books:**

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| **Sr. No** | **Author/s** | Name of the Book | Publisher | Edition & Year |
| **T-01** | Ramesh Sharda , Dursun Delen , Efraim Turban | Business Intelligence – A Managerial Perspective on Analytics | Pearson Publication | 4th edition, 2017 |
| **T-02** | Cindi Howson | Successful Business Intelligence | Tata McGraw Hill | 2nd edition, 2013 |

**Reference Books:**

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| **Sr. No** | **Author/s** | Name of the Book | Publisher | Edition & Year |
| **R-01** | [Swain Scheps](https://www.google.co.in/search?tbo=p&tbm=bks&q=inauthor:%22Swain+Scheps%22&source=gbs_metadata_r&cad=4) | Business Intelligence For Dummies | John Wiley & Sons | 1st edition, 2011 |
| **R-02** | [Rick Sherman](https://www.google.co.in/search?tbo=p&tbm=bks&q=inauthor:%22Rick+Sherman%22&source=gbs_metadata_r&cad=3) | Business Intelligence Guidebook: From Data Integration to Analytics | Elsevier Science | 1st edition, 2014 |
| **R-03** | Mike Biere | Business Intelligence for the Enterprise | Pearson Education | 3rd edition, 2016 |