

# GUJARAT TECHNOLOGICAL UNIVERSITY

## MASTER OF BUSINESS ADMINISTRATION (Part-Time)

Year – I (Semester – II) (W.E.F. Academic Year 2017-18)

**Subject Name: BUSINESS ANALYTICS (BA)**

**Subject Code: 3529904**

**\_Subject Credits: 3**

**Total Marks: 150**

### 1. Course Objectives:

- To equip the students with basic understanding of business analytics and its role within an organization.
- To provide sound domain knowledge of business analytics and its critical concepts
- To prepare students for business intelligence systems and applications of business analytics
- To gain an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making.

**2. Course Duration:** The course duration is of **36 sessions of 75 minutes** each.

### 3. Course Contents:

Module No.	Modules with its Contents/Chapters	No. of Sessions	Marks (out of 70)
I	Introduction to Business Analytics (BA) – Need, Components, Types and Techniques (Descriptive, Predictive and Prescriptive); Key Purpose of Using IT in Business; Information Users and Their Requirements; Framework for Data Driven Decision Making;	8	14
II	Types of Digital Data – Definition, Sources, Storage and Characteristics of Structured, Unstructured and Semi-Structured Data; On Line Analytical Processing (OLAP) versus Online Transaction Processing (OLTP); Data Models for OLTP and OLAP	10	21
III	Definitions and Examples in Business Intelligence, Data Mining, Big Data, Web and Social Media Analytics, Machine Learning, Data Science, Data Lake; Various Perspectives of Managing Data; Need, Features and Use of Business Intelligence (BI); BI Component Framework; Business Intelligence versus Business Analytics	10	21

<b>IV</b>	Analytics in Business Support Functions – Human Capital Analytics, IT Analytics, Sales & Marketing Analytics; Analytics in Industries – Telecom, Retail, Healthcare; Analytical Application Development; Process for Designing and Developing Social Media Analytics Application	8	14
<b>V</b>	<p><b>Application:</b></p> <ul style="list-style-type: none"> <li>Data Analytics through Spreadsheet</li> <li>Students should select Small &amp; Medium Enterprise and perform an exercise for application of the concepts learned under the domain of Business Analytics. Student has to prepare a report and give the presentation in the class.</li> </ul>		(30 Marks of CEC Internal Evaluation)

#### 4. Suggested Case Studies:

S. No.	Title of Case Study
1.	Case: GoodLife HealthCare Group
2.	Case: GoodFood Restaurants Inc.
3.	Case: TenToTen Retail Stores

#### 5. Teaching Methods:

The course will use the following pedagogical tools:

- (a) Case discussions. (Appropriate cases may be used to teach all above modules)
- (b) Discussion on issues and techniques
- (c) Projects/Assignments/Quiz/Class Participation, etc.

#### 6. Evaluation:

The evaluation of participants will be on continuous basis comprising of the following elements:

<b>A</b>	Continuous Evaluation Component (CEC) comprising of Projects/ Assignments/ Quizzes/ Individual or group Presentation/ Class participation/ Case studies etc	(Internal Assessment- 50 Marks)
<b>B</b>	Mid-Semester examination	(Internal Assessment-30 Marks)
<b>C</b>	End –Semester Examination	(External Assessment-70 Marks)

#### 7. Text Books:

Sr. No.	Author	Name of the Book	Publisher	Year of Publication
1	R.N.Prasad and Seema Acharya	Fundamentals of Business Analytics	Wiley	2016
2	U. Dinesh Kumar	Business Analytics – The Science of Data-Driven Decision Making	Wiley	2017

**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.

**8. Reference Books:**

Sr. No.	Author	Name of the Book	Publisher	Year of Publication
1.	Anil Maheshwari	Data Analytics	McGraw Hill Education	First edition (1 <sup>st</sup> July 2017)
2.	Jesper Thorlund & Gert H.N. Laursen	Business Analytics for Managers: Taking Business Intelligence Beyond	Wiley	Latest Edition
4.	Sahil Raj	Business Analytics	Cengage Learning	Latest Edition
6.	James R Evans	Business Analytics	Pearson	Latest Edition

**9. Session Plan: (36 sessions of 75 minutes)**

Session Nos.	Topics to be covered
1-2	Introduction to Business Analytics (BA) – Need and Components
3-5	Introduction to Business Analytics (BA) –Types and Techniques (Descriptive, Predictive and Prescriptive);
6-8	Key Purpose of Using IT in Business; Information Users and Their Requirements; Framework for Data Driven Decision Making;
9-11	Types of Digital Data – Definition, Sources, Storage and Characteristics of Structured, Unstructured and Semi-Structured Data;
12-15	On Line Analytical Processing (OLAP) versus Online Transaction Processing (OLTP);
16-18	Data Models for OLTP and OLAP
19-22	Definitions and Examples in Business Intelligence, Data Mining, Big Data, Web and Social Media Analytics, Machine Learning, Data Science, Data Lake;
23-25	Various Perspectives of Managing Data; Need, Features and Use of Business Intelligence (BI);
26-28	BI Component Framework; Business Intelligence versus Business Analytics
29-32	Analytics in Business Support Functions – Human Capital Analytics, IT Analytics, Sales & Marketing Analytics; Analytics in Industries – Telecom, Retail, Healthcare;
33-36	Analytical Application Development; Process for Designing and Developing Social Media Analytics Application

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