****

**Preamble**

The following document contains the semester wise course matrices, detailed syllabuses along with credits, breakup of credits in terms of lecture, tutorials and laboratory.

**Graduate Attributes**

**Need of the MBA - Business Analytics programme**

Most industry sectors have recognized the value that Business Analytics can provide in not only driving Business Solutions, but also in helping them to differentiate themselves to customers, investors and regulators. The global Business Analytics is a USD 105 billion market, growing at a CAGR of 8%. India, with its surfeit of talent, has become the Analytics hub for organizations across the world. Large corporate like Walmart, Target, Citibank, ICICI Bank, Airtel, Vodafone are increasingly adopting analytics in their processes. Consulting giants like PwC, IBM, Accenture, Infosys have large teams offering Analytics solutions to their clients. All of these translate into a huge global and domestic demand for Business Analytics professionals.

**Employment Potential**

As per McKinsey Global Institute, the analytics Industry is one of the fastest growing in modern times which is poised to become a $50 billion market by 2017. With this sudden surge in the analytics industry there is a tremendous increase in the demand for analytics expertise across all domains, throughout all major organizations across the globe. It has been predicted that by 2018, the United States alone could face a shortage of 140,000 to 190,000 people with deep analytical skills as well as 1.5 million managers and analysts with the know-how to use the analysis of big data to make effective decisions.

NASSCOM has estimated that from 50,000 today, the demand for Analytics professionals in India will grow to 2,50,000 in the coming two three years.

According to *Analytics India Magazine* (2013), India will remain the preferred destination for Analytics Outsourcing as compared to other Asian countries like Philippines and China. Unlike the BPO’s, Analytics (considered as part of KPO) requires skills that are not easily available in these countries. India’s Analytics talent pool will be in high demand because of their process expertise and English language proficiency.

**Major Employers in Business Analytics**

There are mainly four types of employers

1. Large IT companies who have an Analytics practice [Example: Accenture, Infosys, TCS, Wipro]
2. Analytics KPOs [Example: Genpact, WNS]
3. In-House Analytics Units of large corporate [Example: Citibank, Dell, HP, Spencer, Target]
4. Niche Analytics firms [Example: Cognizant Analytics, AbsolutData, Mu Sigma Analytics]

**Career Opportunities**

After learning this programme, student can have following roles in the industry.

* Analytics Analyst
* Data Analyst / Data Management Analyst
* Research Analyst
* Reporting & Analytics Lead
* Data Scientist
* Predictive Analytics Specialist
* Data visualizers
* Business Analytics Consultant
* Data Miner
* Analytics Manager
* Predictive Modelling Analyst
* Statistician

**Techno India University, West Bengal**

**Syllabus for 2-YEAR M.B.A. (After Graduation)**

**Elective: Business Analytics**

**1st Semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Title** | **Contact Hrs. / Week** | | | **Credit** |
| **L** | **T** | **P** |
| TIUMBA-101 | Management Concepts and Practices | 4 | 0 | 0 | 4 |
| TIUMBA-102 | Accounting for Managers | 4 | 0 | 0 | 4 |
| TIUMBA-103 | Financial Management | 4 | 0 | 0 | 4 |
| TIUMBA-104 | Economic Analysis for Business Decisions | 4 | 0 | 0 | 4 |
| TIUMBA-105 | Statistics for Business | 4 | 0 | 0 | 4 |
| TIUMBA-106 | Spreadsheet Modelling | 3 | 0 | 2 | 4 |
| TIUMBA-107 | Written Analysis and Communication | 4 | 0 | 0 | 4 |
| **Total Credits** | | | | | **28** |

**2nd Semester**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Course Code** | | **Course Title** | **Contact Hrs. / Week** | | | **Credit** |
| **L** | **T** | **P** |
| TIUMBA - 201 | | Marketing Management | 4 | 0 | 0 | 4 |
| TIUMBA - 202 | | Human Resources Management | 4 | 0 | 0 | 4 |
| TIUMBA- 203 | | Project Management and Budgeting | 4 | 0 | 0 | 4 |
| TIUMBA- 204 | | Research Methodology | 3 | 0 | 2 | 4 |
| TIUMBA- 205 | | Introduction to Business Analytics | 3 | 0 | 2 | 4 |
| TIUMBA- 206 | Introduction to Digital Marketing | | 4 | 0 | 0 | 4 |
| TIUMBA- 207 | | Business Law and Ethics | 4 | 0 | 0 | 4 |
| **Total Credits** | | | | | | **28** |

**3rd Semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Title** | **Contact Hrs. / Week** | | | **Credit** |
| **L** | **T** | **P** |
| TIUMBA-301 | Introduction to Entrepreneurship | 4 | 0 | 0 | 4 |
| TIUMBA-302 | Elective Paper 1 | 3 | 0 | 2 | 4 |
| TIUMBA-303 | Elective Paper 2 | 3 | 0 | 2 | 4 |
| TIUMBA-304 | Elective Paper 3 | 3 | 0 | 2 | 4 |
| TIUMBA-305 | Elective Paper 4 | 3 | 0 | 2 | 4 |
| TIUMBA-306 | Summer Internship | 0 | 12 | 4 | 8 |
| **Total Credits** | | | | | **28** |

**4th Semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Title** | **Contact Hrs. / Week** | | | **Credit** |
| **L** | **T** | **P** |
| TIUMBA - 401 | Consumer Behavior | 4 | 0 | 0 | 4 |
| TIUMBA- 402 | Elective Paper 5 | 3 | 0 | 2 | 4 |
| TIUMBA- 403 | Elective Paper 6 | 3 | 0 | 2 | 4 |
| TIUMBA- 404 | Elective Paper 7 | 3 | 0 | 2 | 4 |
| TIUMBA- 405 | Elective Paper 8 | 3 | 0 | 2 | 4 |
| TIUMBA- 406 | Project Work and Viva Voce | 0 | 12 | 4 | 8 |
| **Total Credits** | | | | | **28** |

**Choice of Electives**

|  |  |
| --- | --- |
| **Elective: Business Analytics** | |
| Elective Paper 1 | DBMS and Data Warehousing |
| Elective Paper 2 | Multivariate Data Analysis 1 |
| Elective Paper 3 | Time Series Econometrics |
| Elective Paper 4 | Data Mining for Business Analytics |
| Elective Paper 5 | Multivariate Data Analysis 2 |
| Elective Paper 6 | Predictive Modeling using SAS |
| Elective Paper 7 | Analytics with R |
| Elective Paper 8 | Big Data Analytics |