

## **Draft Syllabus**

### **Master's in Business Administration (MBA) in Data Analytics**

#### **Aim of the Course**

The course focuses on creating the next generation of corporate leaders who can analyse and understand the complexities of data analytics and making data driven decisions. The course will focus on generation of data, data storage, data analysis, data security, and how to turn data into information. Students will be encouraged to understand and appreciate the problems with data analysis that and the use of data to enhance business productivity.

#### **Outline of the proposed Course Structure:**

The course would consist of 4 semesters. The course offerings in the program are arranged to ensure that students get a general understanding of the business processes, acquiring a sound domain knowledge all across the field of business in finance, marketing, HR, quantitative analysis. In addition, the major thrust in this program would be data analysis to ensure data driven decision making, and improving business productivity. The first 2 semesters will expose students to fundamental of business decisions using the tools in finance, marketing, Human Resource Management, quantitative analysis, and management information systems. The 3rd and the 4<sup>th</sup> semester will expose students to the concepts of data analytics, data mining, big data, data analysis and transforming data into usable information. The course pedagogy will involve class room discussions, using class lecture, case analyses, and working on, writing, and presenting research papers. The final semester would require the submission of a dissertation on a topic of choice. The possibility of student internships with organizations and institutions working on data security will also be explored in this period to give students a practical test scenario where they can employ the skills learnt during the duration of the programme. The total number of credits for the programme would be around 110 at par with other Master's programmes in Indian universities. Students would also be given the option to choose a module according to their preferences in the first two semesters during their coursework.

#### **Structure – 4-semester courses: Total Credits 110**

### **Semester 1: Understanding the Fundamentals of Business**

Introduction to Management 3 credits

Sustainable Marketing Management 4 credits

Economic Analysis 4 credits

Fundamentals in Accounting 3 credits

Fundamental Financial Analysis 4 credits

Introduction to Business Communication 3 credits

Research Paper 1 leading to the Master's Thesis 6 credits

Total Credits: 27

### **Semester 2: Understanding of fundamental Business Processes**

Corporate Finance 3 credits

Risk Management in a Global Economy 4 credits

Managerial Economics 4 credits

Introduction to cybersecurity 3 credits

Business Forecasting 3 credits

Global Business Strategy 4 credits

Paper 2 leading to the Master's Thesis 6 credits

Total Credits: 27

### **Semester 3: Understanding the Fundamentals of Cybersecurity 1**

Fundamentals in Operational Research 3 credits

Quantitative Methods in Business 4 credits

Sustainable Marketing Practices 3 credits

Advanced Applications of Excel 3 credits

Fundamentals of Data Analytics 4 credits

Artificial Intelligence and Data Mining 4  
credits

HR Analytics 3 credits

Research Paper 3 leading to the Master's Thesis 6 credits

Total Credits: 30

### **Semester 4: Understanding the Fundamentals of Cybersecurity 2**

Econometrics 4 credits

Fundamentals of Descriptive Analytics 3  
credits

Fundamentals of Prescriptive Analytics 3  
credits

Healthcare Analytics 3 credits

Strategic Management 4 credits

Applied Business Analytics 3 credits

MBA Thesis: 6 credits

Total 26

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