

# **Elm Institute of Business Studies Inc. Texas, USA**



## **Post Graduate Program In Big Data Analytics**

*Industry Integrated Learning Experience  
&  
American Certification*



## SEMESTER 1

### **A. INTRODUCTION TO ANALYTICS**

1. Analytic techniques
2. Financial Analytics
3. Marketing Pricing Analytics/ Social Network Analysis
4. Retail Analytics (Customer Analytics / Supply Chain Analytics)
5. Business Fundamentals / Text Analytics

### **B. INTRODUCTION TO DATA MANAGEMENT**

1. Introduction to data warehouse and OLAP
2. Data types
3. Data preparation
4. Languages of data science
5. Case for business analytics- business intelligence and data mining
6. Business problem analyzing using key questions

### **C. MACHINE LEARNING 1**

1. Linear regression
2. Understand and implement algorithms like K-NN, NAÏVE BAYES, logistic regression
3. Clustering

### **D. MACHINE LEARNING II**

1. Analytical decision making
2. Time Series
3. Decision trees
4. Theory of entropy and information gain
5. Stopping rules, Overfitting problem
6. Cross validations, Pruning
7. Ensemble learning notation

### **E. SUPPORT VECTOR MACHINES**

1. Introduction to SVM
2. Non linear SVM

\* Subject to minor changes



## SEMESTER 2

### **F. STATISTICS AND PROBABILITY USING R**

1. R basics
2. R functions
3. Credit risk
4. Data collection
5. Extract data in R
6. Logistic regression theory R
7. Data visualization using R

### **G. DATA STRUCTURES AND ALGORITHMS USING PYTHON**

1. Python basics
2. Spyder IDE
3. Data structure in Python
4. Numpy arrays, nd arrays,
5. Indexing, processing
6. Getting started with Pandas
7. Data frame manipulation

### **H. DATA VISUALIZATION DASH BOARDING USING TABLEAU**

1. Tableau basics
2. Visualization in depth
3. Advanced visualization
4. Enterprise dash boards data presentation
5. Best practices for dash boarding and reporting

### **I. ADVANCED OPERATIONS RESEARCH USING SPSS/ STAT CRAFT**

1. Business forecasting based on historical patterns

### **J. RELATIONAL DATABASE MANAGEMENT SYSTEMS**

1. Big Data & relational database management

\* Subject to minor changes

# Post Graduate Program in Big Data Analytics. PGPBDA

## Dual Certification:

- Elm Institute of Managements, Texas, USA.
- Elm Institute of Business Studies, Bangalore

## Duration of the Program:

- 300 HRS/ 150 classes / Eligibility : Graduation

## Software Tools In The Program:

- R, MYSQL/SQL, Python, Tableau, Hadoop (AWS), SPSS

## Highlights:

- Foreign Trips
- Free Laptops And IELTS
- Overseas Career Guidance
- Lowest Fees Structure in Bangalore

## Additional Enrichment Services:

- Free C2C training worth INR 8000/-
- Free digital Marketing training and certification worth INR 30,000/-
- Individual certification and customized interview preparations
- live projects and case studies

## Fees:

INR: 1,70,000/-

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