Fabtech Technical Campus College of Engineering Sangola

Department of Artificial Intelligence & Data Science

SY B. Tech SEM-IV

| Sr. No. | Subject | CO Statement | |
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| 1. | Data Analysis (BTAIC401) | CO1 | Apply preprocessing techniques to convert raw data so as to enable further analysis |
| | | CO2 | Apply exploratory data analysis and create insightful visualizations to identify patterns |
| | | CO3 | Understand how to derive the probability density function of transformations of random variables and use these techniques to generate data from various distributions |
| | | CO4 | Understand the statistical foundations of data science and analyze the degree of certainty of predictions using statistical test and models |
| | | CO5 | Introduce machine learning algorithms for prediction and to derive insights |
| 2 | Database Management System (BTAIC402) | CO1 | Master the basic concepts of relational DBMS and its types. |
| | | CO2 | Perform various types of operations on relational databases using DDL, DML, DCL in SQL |
| | | CO3 | Understand the concept of how non-relational databases differ from relational databases from a practical perspective. |
| | | CO4 | Master the basic concepts of designing NoSQL database management system. |
| | | CO5 | Able to Identify what type of NoSQL database to implement based on business requirements |
| 3 | Basic Human Rights (BTAIC403) | CO1 | Students will be able to understand the history of human rights. |
| | | CO2 | Students will learn to respect others caste, religion, region and culture. |
| | | CO3 | Students will be aware of their rights as Indian citizen |
| | | CO4 | Students will be able to understand the importance of groups and communities in the society. |
| 4 | Probability Theory and Random Processes | CO1 | Demonstrate understanding of fundamental concepts in probability |
| | (BTAIC404) | CO2 | Understand how to derive the probability density function of transformations of random variables and use these techniques to generate data from various distributions |

| | | CO3 | Apply preprocessing techniques to convert |
|---|---|-----|---|
| | | CO3 | raw data so as to enable further analysis |
| | | | Understand the statistical foundations of data |
| | | CO4 | science and analyze the degree of certainty of |
| | | | predictions using statistical test and models |
| 5 | Programming in JAVA | CO1 | To understand basics of JAVA |
| | (BTAIC405D) | CO2 | To use Packages & interfaces |
| | | CO3 | To apply Exception Handling & |
| | | | Multithreaded Programming |
| | | CO4 | To acquire Java Database Connectivity |
| | | CO5 | To recognize Applet, Event Handling and AWT |
| 6 | Data Analysis Lab and Database Management System Lab | CO1 | Apply exploratory data analysis and create insightful visualizations to identify patterns |
| | (BTAIL406) | | Understand how to derive the probability |
| | | CO2 | density function of transformations of random |
| | | | variables and use these techniques to generate |
| | | | data from various distributions |
| | | | Perform various types of operations on |
| | | CO3 | relational databases using DDL, DML, DCL |
| | | | in SQL |
| | | | Understand the concept of how non-relational |
| | | CO4 | databases differ from relational databases |
| | | | from a practical perspective. |
| | | CO5 | Master the basic concepts of designing |
| | | | NoSQL database management system. |
| 7 | SEMINAR-II (BTAIS407) | 001 | Establish motivation for any topic of interest |
| | | CO1 | and develop a thought process for technical |
| | | | presentation. |
| | | 002 | Organize a detailed literature survey and build |
| | | CO2 | a document with respect to technical |
| | | | publications. |
| | | CO3 | Analysis and comprehension of proof-of- |
| | | 004 | concept and related data. |
| | | CO4 | Effective presentation and improve soft skills. |