



JAI HIND COLLEGE

Basantsing Institute of Science & J. T. Lalvani College of Commerce.
and Sheila Gopal Raheja College of Management.

Autonomous

Program Name: Master of Science (M.Sc in Big Data Analysis)

PROGRAM OBJECTIVES:

PO1: To empower students with relevant programming abilities.

PO2: To inculcate knowledge with statistical analysis of data with professional statistical software

PO3: To train students to build and assess data-based model skills in data management.

PO4: To impart knowledge on data science concepts and methods to solve problems in real-world contexts and will communicate these solutions effectively

PO5: To inculcate critical thinking to carry out scientific investigation objectively without being biased with preconceived notions.

PO6: To equip the student with skills to test problems, formulate a hypothesis, evaluate and validate results, and draw reasonable conclusions thereof.

PO7: To prepare students to formulate research or to develop careers in industry of data sciences and allied fields

PO8: To train and update students with relevant knowledge and skills appropriate to professional activities and demonstrate the highest standards of ethical issues in data sciences.

PO9: To learn different statistical methods, probability, mathematical foundations, and computing methods relevant to data analytics.

PO10: To inculcate knowledge about storage, organization, and manipulation of structured data along with challenges associated with big data computing.

PO11: To make the students aware about the analytics chain beginning with problem identification and translation, followed by model building and validation with the aim of knowledge discovery in the given domain.

PO12: To impart knowledge on dimensionality reduction techniques in finding patterns/features/factors in big data.

PO13: To evaluate various statistics from stored and/or streaming data in the iterative process of model selection and model building.

PO14: To make them aware about optimization techniques such as linear programming, non-linear programming, and transportation techniques in various problem domains such as marketing and supply chain management.

PO15: To inculcate knowledge about analytical models to make better business decisions.

COURSE OUTCOMES:

CO1: Present results effectively by making appropriate displays, summaries, and tables of data.

CO2: Perform simple statistical analyses using R.

CO3: Know the principle definitions, fundamental theorems, and important relationships in statistics.

CO4: Communicate mathematical ideas orally and in writing, with precision, clarity and organization, using proper terminology and notation.

CO5: Formulate the LPP for a real-life Problems and give the solution for the problem using Graphical, Simplex and Big-M method.

CO6. Understand the basic concepts and the applications of database systems.

CO7: Identify the data models for relevant problems.

CO8: Student must be Able to understand the building blocks of Big Data.

CO9: Understand how to use data visualization.

CO10: Understand simple statistical summaries using software designed for statistical analyses.

CO11: Appreciate the strengths and limitations of various data mining and data warehousing models.

CO12: Explain the analysing techniques of various data.

CO13: Can train a classifier on an unknown data set to optimize its performance.

CO14: Develop novel solutions to identify significant features in data e.g. identify the feedback of potential buyers over online markets to increase the popularity of different products.

CO15: Implement advance statistical concepts and some of their basic applications in real world.

CO16: Interpret the findings from the data analysis, and the implications of those findings.

CO17: Comprehend fundamental concepts in Data Science and Analytics.