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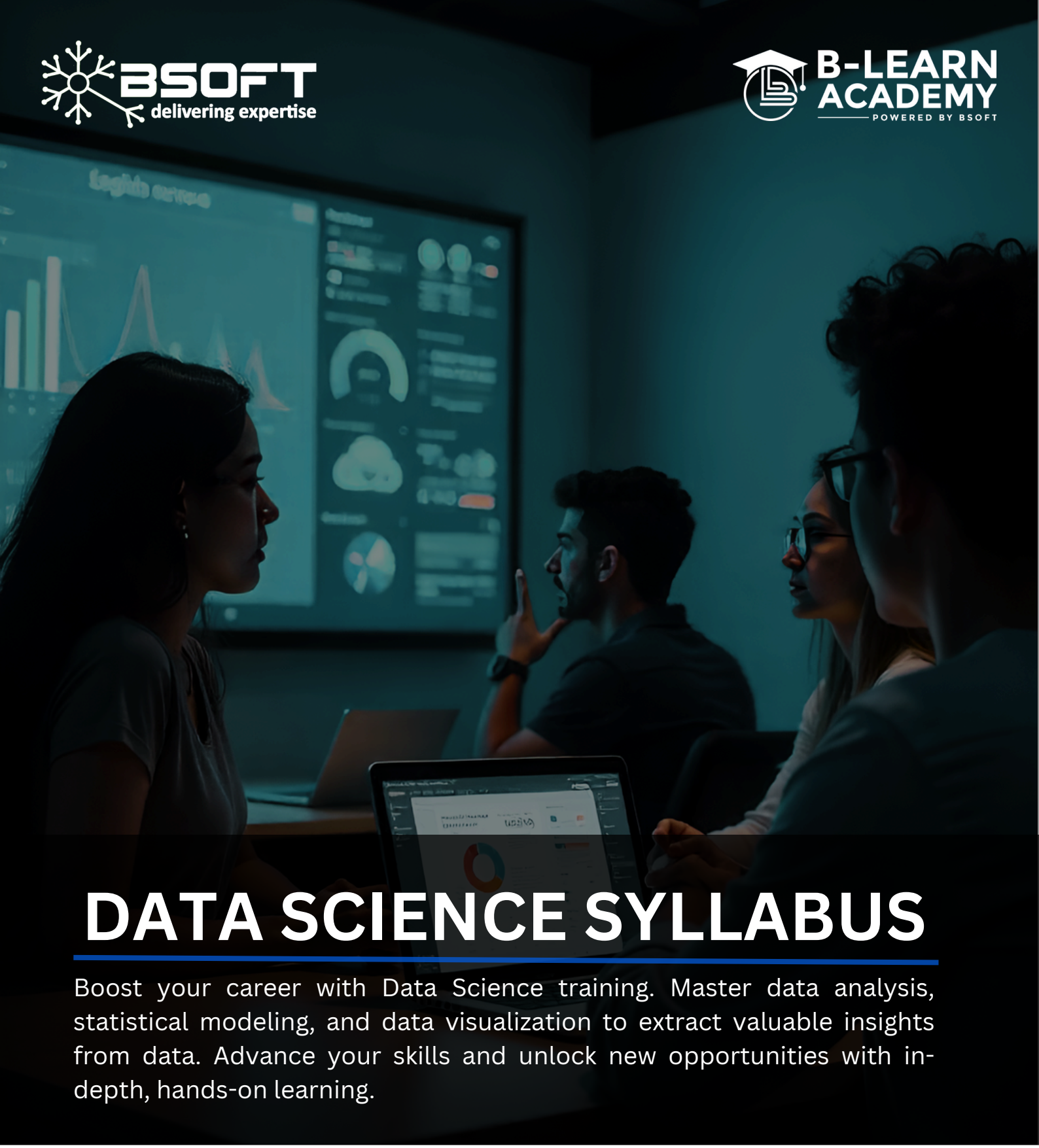

DATA SCIENCE SYLLABUS

Boost your career with Data Science training. Master data analysis, statistical modeling, and data visualization to extract valuable insights from data. Advance your skills and unlock new opportunities with in-depth, hands-on learning.

Industry Expert Trainers

Placement Support

Community Access

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DATA SCIENCE

Our comprehensive Data Science training is designed for professionals aiming to master data analysis, statistical modeling, and data visualization. Covering both foundational concepts and advanced techniques, this course equips you with the skills to extract actionable insights from data and make data-driven decisions.

With hands-on projects and real-world scenarios, you'll gain practical experience alongside in-depth theoretical knowledge. Key topics include data wrangling, exploratory data analysis, statistical methods, data visualization, and tools like Python, R, and SQL. Guided by expert instructors, you'll receive personalized support to excel in data science and advance your career.

Elevate Your IT Career: Master Data Science and enhance your expertise in data analysis, statistical modeling, and data visualization with the Data Science syllabus.

Boost your career with specialized Data Science training in data analysis, statistical modeling, and data visualization.

Data Science training equips you to master data analysis, statistical modeling, and data visualization, boosting your career in analytics.

The Data Science course covers essential concepts and tools, ensuring your skills align with industry standards in data analysis and visualization.

Enhance your expertise in Data Science by mastering key concepts and tools for data analysis, visualization, and deriving actionable insights from complex datasets.

Mastering Data Science equips you for higher-paying roles, career growth, and opportunities to lead and manage data-driven projects and analytics initiatives.

The Data Science course provides hands-on experience with real-world data projects, helping you build a strong portfolio to showcase your skills to potential employers.

About Program

Our comprehensive Data Science training program is designed for professionals aiming to specialize in data analysis and insights. Covering key areas like data processing, visualization, statistics, and exploratory data analysis, this course provides hands-on experience through practical labs. You'll gain a deep understanding of data science tools and techniques, preparing you for a successful career in data analysis, business intelligence, and decision-making.

Our Extended Support

Expert Instructors: Learn from top professionals with extensive Azure experience.

Practical Insights: Explore real-time scenarios and industry best practices.

Comprehensive Materials: Access up-to-date study resources.

Hands-On Labs: Apply concepts with practical lab exercises.

Resume Support: Use professionally crafted resume samples for Azure roles.

Interview Prep: Benefit from mock interviews and targeted preparation sessions.

Industry Relevance: Explore insights with live demos from industry experts.

Placement Assistance: Receive job openings and referral support.

Community Access: Connect with a network of past and current students and trainers.

Flexible Scheduling: Select from various schedules to fit your needs.

Program Curriculum

DATA SCIENCE

MATHS FOR DATA SCIENCE (LINEAR ALGEBRA1)

- Linear Systems and Gaussian Elimination In this module we will learn what a matrix is and what it represents. We will explore how a system of linear equations can be expressed via matrices.
- Matrix - In this module, we will learn how to solve a linear system of equations with matrix algebra. Maths For Data Science(Linear Algebra 2)
- Projection And Least Square-In this module we will discuss projections and how they work. We will build on a foundation using 1D 2D projections and explore the concept in higher dimensions over time.
- Determinant and Eigens-In this module we will learn how to compute the determinant of a matrix. Afterwards, Eigenvalues and Eigenvectors will be covered. Maths For Data Science(Probability)
- Important concepts in probability theory including random variables and independence . Maths For Data Science(Calculus)
- Definition of a Derivative- What is a derivative? Calculate simple derivatives from the definition of a derivative.
- Product and Chain Rule-Use the product and chain rules to calculate the derivatives of more complicated functions.
- Using Derivatives to Graph Functions-Use where derivatives are positive and negative to help graph a function.
- Finding Maximums and Minimums-Use derivatives to find the maximum and minimum values of functions.

Statistics 1

- Introduction & Descriptive Statistics In this module, you will learn about the fundamentals of descriptive statistics, which include mean, median, mode, variance, and standard deviation. The module aims to demonstrate the importance of measures of central tendency and dispersion for various levels of measurement. You will gain an understanding of how these statistical tools are used to analyze and interpret data accurately. The module will cover the basics of mean, median, mode variance, and standard deviation and provide examples of their practical applications. By the end of the module, you will be equipped with the knowledge to use these measures for data analysis effectively.

Statistics 2

- Introduction to Probability Distributions- In this module, we will cover various distributions and understand pdf, pmf and cdf

Program Curriculum

- Hypothesis Testing-This module aims to equip you with the necessary knowledge to choose the appropriate test when analyzing data and determining their relationships. It will provide a detailed explanation of the assumptions underlying each test and teach you how to interpret the results of a hypothesis test accurately.

Feature Engineering Feature Engineering

- Feature Selection
- Handling missing values
- Handling imbalanced data
- Handling outliers
- Encoding
- Feature Scaling

Machine Learning Machine Learning (Supervised - 1)

- AI Vs ML Vs DL Vs DS
- Types Of ML Techniques
- Supervised vs unsupervised and semi-supervised and reinforcement learning

Machine Learning (Supervised - 2)

- Linear Regression
- Logistic Regression
- Task- End To End Project With Deployment
- Support Vector Machines
- Naive Bayes

Machine Learning (Supervised - 3)

- Decision Tree
- Gradient Boosting
- Xgboost
- Task- End To End Project With Deployment

Program Curriculum

Machine Learning (Unsupervised)

- PCA
- K Means Clustering
- Hierarchical Clustering
- Dbscan Clustering
- Performance Metrics In Clustering

Machine Learning (Time Series)

- Time Series Using fbprophet
- Time Series Using AutoTs
- Time Series Using Darts

End To End ML Projects With Deployment

- Developing a Comprehensive Image Scraper with Python
- Machine Learning-Based Fault Prediction for Industrial Sensors End To End Project
- Developing an Advanced Review Scraper with Python and Data Visualization End To End ML Projects

With Deployment

- ShipSage: Machine Learning for Smart Shipment Price Prediction
- GreenVision: AI-driven Forest Cover Type Classification System
- Customer Categorizer: Leveraging Machine Learning to Uncover Hidden Market Segments
- PhishFinder: Machine Learning-Based Phishing Detection and Classification WithBento ML and ML

FLOW Week 32 Interview Preparation

- Resume Discussion And Resume Preparation
- Python Interview Questions Discussion
- Stats Interview Questions Discussion
- Machine Learning Interview Questions Discussion
- How To Explain End to Projects To Interviewer

Program Curriculum

Deep Learning Deep Learning ANN

- Artificial Neural Network Working
- Back Propagation In ANN
- Chain Rule Of Derivatives
- Vanishing Gradient Problem
- Exploding Gradient Problem

Deep Learning Fundamentals

- Different Activation functions
- Different types of Loss Function
- Different types Of Optimizers
- Weight Initialization Techniques
- Dropout Layer
- Batch Normalization

Deep Learning Frameworks

- Working With Tensorflow Keras
- Working With Pytorch

Deep Learning (Computer Vision Fundamentals)

- CNN Fundamentals
- Lenet-5 Variants With Research Paper And Practical
- Alexnet Variants With Research Paper And Practical

Deep Learning (Image Classification & Transfer Learning)

- Googlenet Variants With Research Paper And Practical
- Vggnet Variants With Research Paper And Practical
- Resnet Variants With Research Paper And Practical

Deep Learning (Computer Vision - Object Detection)

- Object Detection(In this module we will discuss various advanced algorithms whichwill help us perform object detection)

Program Curriculum

Deep Learning (Computer Vision - Segmentation Tracking)

- Image Segmentation(In this module we will discuss various advanced algorithms which will help us perform image segmentation)
- Object Tracking (In this module we will discuss various advanced algorithms which will help us perform object tracking)

Deep Learning (NLP - 1)

- NLP With Machine Learning- In this module, we will discuss how we can apply different NLP techniques in text and work with ML algorithms
- NLP With Recurrent Neural Network and Its variants

Deep Learning (NLP - 2)

- NLP with Sequence Models- In this module, we will discuss about various SequenceModels in Deep Learning
- NLP With Attention Models- In this module, we will discuss Transformers,BERT, andGPT models End To End Deep Learning Projects With Deployment
- Developing an Audio Classification System for Accurate Speech Recognition
- Developing a Robust Helmet Detection System using Computer Vision End To End Deep Learning Projects With Deployment
- Developing an AI-Driven Text Summarization System with Deep Learning Techniques
- Developing an AI Model for Automated Lungs Disease Diagnosis Using Bento MLand ML FLOW End To End Deep Learning Projects With Deployment
- Developing a High-Quality Text-to-Speech System with Advanced NLP Techniques ● AI-Enabled Object Detection for Improved Industrial Safety

Big Data Big Data - Hadoop

- Hadoop Big Data - Spark
- Spark Data Analytics

Data Analytics - PowerBi

- PowerBI

Program Curriculum

Tableau

- End To End Review Scraper Project With Deployment In Cloud
- Weather App- Build A Web app that displays current weather conditions for a specific location using

OpenWeatherMap API

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OpenWeatherMap API

- Image web scraper- Build A Image Web Scraper which extracts images of GoogleEnd To End ML

Projects With Deployment

- Machine Learning-Based Fault Prediction for Industrial Sensors End To End Project
- Developing a Comprehensive Image Scraper with Python
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FLOW Deep Learning Projects

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About Blearn Academy

BSOFT delivering expertise

A premier institute established in 2000 offers technical training and professional development in advanced technology domains. The curriculum, designed by industry experts, includes foundational to advanced courses with hands-on projects. State-of-the-art facilities, experienced instructors, and emphasis on soft skills development prepare graduates for the modern workplace. The institute fosters a vibrant community through workshops, seminars, and networking opportunities with industry experts. Recognized by top-tier technology companies, graduates are highly sought after in the job market.

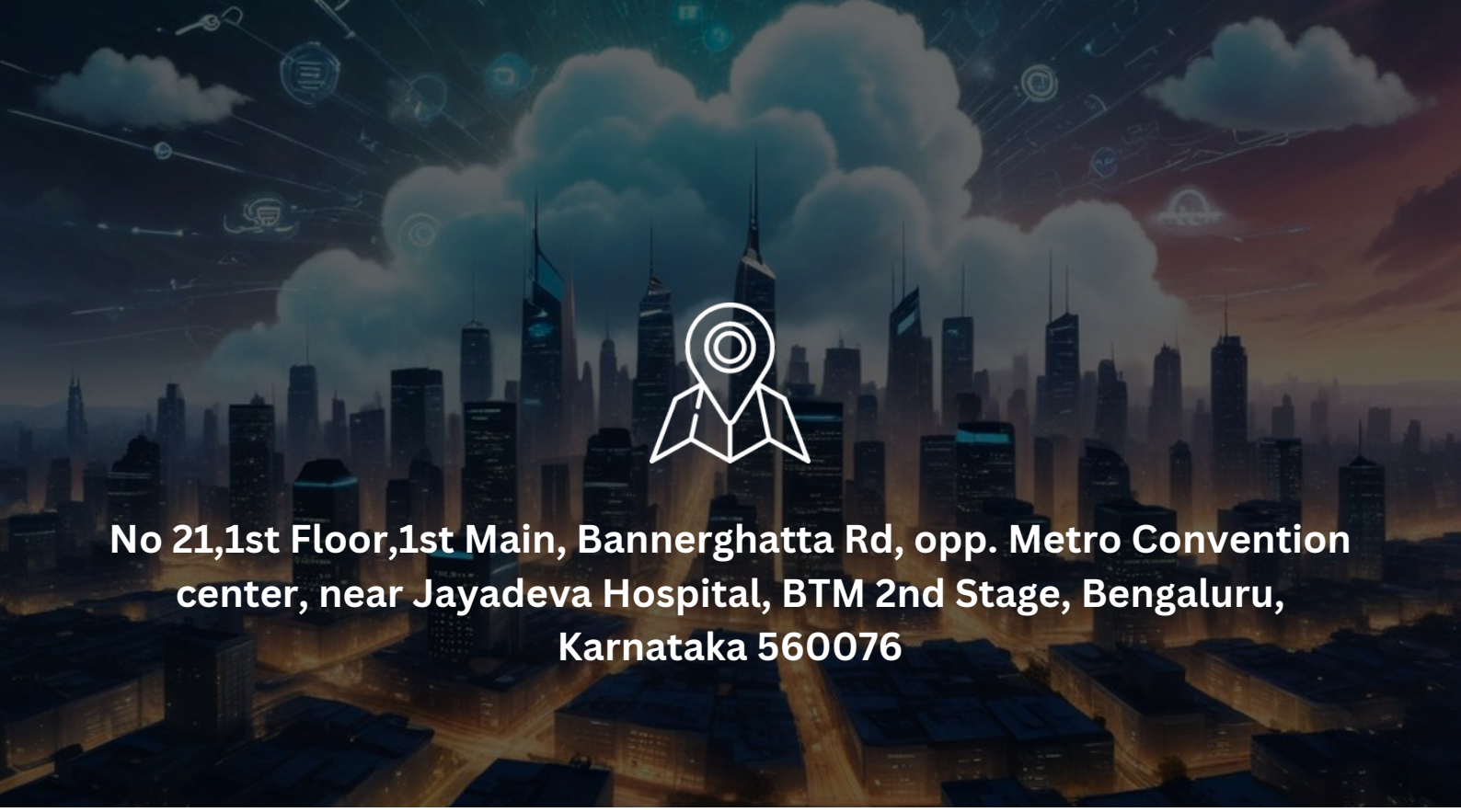
B-LEARN ACADEMY POWERED BY BSOFT

B-Learn Academy, powered by **Bsoft**, is a premier online training platform dedicated to IT enthusiasts and professionals seeking to upskill and advance their careers. Our mission is to provide high-quality, accessible IT training and comprehensive placement support to empower individuals to achieve their career goals in the fast-evolving tech industry from any part of the world.

With a diverse range of courses covering the latest technologies and industry practices, B-Learn Academy ensures that learners stay ahead of the curve. Our expert instructors bring real-world experience and insights, offering practical knowledge that can be immediately applied in professional settings.

Our Alumni are Working in:

TCS TATA CONSULTANCY SERVICES, Capgemini, CSS CORP, Mindtree, DELL
Infosys, Microsoft, HCL, hp, Paytm
wipro, amazon, Mphasis The Next Applied, DXC.technology, SAMSUNG
accenture, ORACLE, Google, intel, verizon
IBM, Tech Mahindra, Cognizant, CISCO, NTT



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Google Rating
4.9 ★★★★★

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