

Business Analytics Master Program

- ✓ 300+ Hiring Partners
- ✓ 175% Average Salary Hike
- ✓ Hybrid Model for Project Sessions



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2cr

worth
scholarships
awarded



600+

professionals
secured jobs
after a career
break



30k+

Trusted
Learners

About The Program

Our Business Analytics master's program is designed for professionals seeking career advancement in this fast-paced field. It offers practical learning with real-world case studies, equipping you with skills to analyse complex data, make informed business decisions, and use tools like R and Tableau. We provide affordable and industry-relevant education to empower India's workforce.

“

We exist to provide accessible, reasonable, and industry-relevant education that empowers India's workforce to grow and develop.



4.79/5



4.66/5



4.8/5



Thousands of student reviews on Switchup,
Course Report, Google and more

Program Highlights



Industry-Relevant & Updated Syllabus

Learn the industry's latest tools, techniques & trends. Gain hands-on experience developing various apps.



360 Degree Knowledge Building

Develop practical skills through real-world projects and assignments



1:1 Dedicated Mentorship

Personalized learning experience from experienced industry professionals.



Multiple Career Opportunities

Boost business analytics career and land roles as data scientist, business manager

Why Learn Business Analytics?



60% rise in
data science jobs



250% highest
salary hike



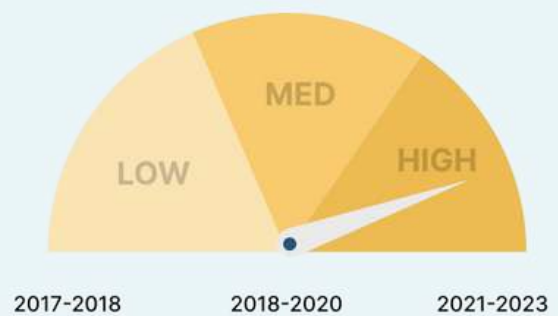
300+ partner
companies

Average annual salary of Business Analyst by experience



** Avg Salary in Lakhs

Demand for business analytics skills increased by **430%**



Business Analytics popularity in last 5 years

Placement Report

30K+

Trusted Learners

9K+

Successfully Placed

50K+

Job Interviews Cracked

Book a free consultation with expert

Contacts Us

Program Details

ELIGIBILITY

- ✓ **Working professional** having more than 6 months of experience in any domain (Technical/Non-Technical)

Qualification:

BE/B.Tech (from any branch), BBA/MBA, MCA/M.Tech, B.Com, B.Sc
(in any branch)



Course duration : 250+ hours

Weekday Batch : 7 months

Monday - Friday : 2 hrs/day

Weekend Batch : 9 months

Saturday - Sunday: 3.5 hrs/day

About instructors:

Experienced software development instructors share valuable practical knowledge and effective solutions, preparing students for success in the industry.

Total Fees:

₹ 1,10,000/- + 18% GST

₹ 1,29,800/-

EASY EMI

₹ 10,817/month

Financing partners



Domain Electives



BFSI

Master financial analysis for strategic development success

[Download brochure](#) 



Sales & Marketing

Learn about the newest marketing and technique to drive strategic development

[Download brochure](#) 



HR

Gain HR analytics expertise & apply to business management via hands-on projects

[Download brochure](#) 



Select any 2 domains and become a domain expert

What Our Alumni's Say



Shravanthi A

Data Scientist



Learnbay has helped me a lot to learn data science applications in the e-commerce industry. The live class concept was really helpful in receiving proper DS training. Thanks to all my mentors and the placement team.



230%
Salary Hike



Ritesh Kumar

Associate Consultant



I knew nothing about data science before I joined Learnbay. But through a variety of instructors, I steadily developed my notion and received solid knowledge and conceptual training in data science with hike of 150%.



150%
Salary Hike



Saurabh Kumar

Data Scientist & Statistician



When I joined Learnbay I did not have any knowledge apart from the very basics. I gradually build my concept via various trainers and get trained in data science with strong knowledge/concepts.



135%
Salary Hike

What Our Alumni's Say



Preksha Mishra

Lead Data Scientist

HCL

The course structure is excellent with emphasis on concept building and tools & software at the same time. The support team is excellent and supportive and quite agile to respond to doubts.



140%
Salary Hike



Mohd. Israr

Data Scientist

Thanks to the Learnbay data science course & excellent guidance, I was able to ace the TCS interview and secure a job with a 210% pay raise. The real-world time projects helped me develop my concepts as a data scientist.



210%
Salary Hike



Sweekrithi shetty

Learnbay stands out with expert-led courses that offer practical and up-to-date content. Hands-on learning and ample resources make it accessible for anyone seeking to upskill in AI, ML, or data science. Learnbay is an excellent choice to learn and grow in these rapidly-evolving fields.

Certificates



World's leading certifications



IBM Course Certificate

Complete your training with the globally recognized certificate.



Microsoft Course Certificate

Achieve professional growth & increase earning potential with Microsoft certification



1 IBM Capstone Project Certificate

Achieve professional growth & increase earning potential with Microsoft certification

Learning Path



Career Service **PRO**



Get 3 years of Job and Placement support

Unleash your career potential with unlimited job access, interview support, and profile review.

6 Mock Interviews with Industry Leaders

Master the art of business analytics and stay ahead of the curve with mockups and industry insights



Resume Build Up Session

Craft a powerful resume showcasing your expertise in business analytics to stand out from the competition

1:1 Review Session

Get 1-on-1 sessions with experts for a better understanding of LinkedIn profile reviews and resumes.















Unlimited Interview Calls

Receive unlimited interview calls from a diverse pool of interested employers/recruiters until you successfully secure a job

Others Vs Learnbay



Benefits		
	Learnbay	Others
Guaranteed Interview Calls		
Industry capstone project certificate from IBM		
Domain specialized programs for professionals		
100% live interactive sessions with industry experts		
On demand video call with industry experts		
Personalized Resume Review Session		

Program Syllabus

Business Analytics

- Introduction to Business Analysis
- Stakeholders in Business Analysis
- Formulating Requirements
- Flowchart and Modelling
- Analyzing and Transforming Requirements
- Finalizing Requirements

EXCEL

Term 1: Module 1 (30 hours)

Basic Excel Functions

- Creating a New Workbook
- Navigating in Excel
- Moving the Cell Pointer
- Using Excel Menus
- Using Excel Toolbars: Hiding, Displaying, and Moving Toolbars
- Entering Values in a Worksheet and Selecting a Cell Range
- Previewing and Printing a Worksheet
- Saving a Workbook & Re-opening a saved workbook

Formatting Worksheets

- Creating Headers, Footers, and Page Numbers
- Adjusting Page Margins and Orientation
- Adding Print Titles and Gridlines, rows to repeat at top of each page
- Formatting Fonts & Values
- Adjusting Row Height and Column Width
- Changing Cell Alignment
- Adding Borders
- Applying Colors and Patterns
- Using the Format Painter
- Merging Cells, Rotating Text
- Using AutoFill

EXCEL

Module 1 (30 hours)

Managing Worksheets

- Switching Between Sheets in a Workbook
- Inserting and Deleting Worksheets
- Renaming and Moving Worksheets
- Protecting a Workbook
- Hiding Columns, Rows, and Sheets
- Splitting and Freezing a Window
- Inserting Page Breaks
- Advanced Printing Options

Basic Formulas and Functions

- Creating a Basic Formula
- Cell Referencing
- Calculating Value Totals with AutoSum
- Editing & Copying Formulas
- Fixing Errors in Your Formulas
- Formulas with Several Operators and Cell Ranges
- Conditional Formatting

Creating Charts

- Creating & Working with Charts
- Creating a Chart
- Moving and Resizing a Chart
- Formatting and Editing Objects in a Chart
- Changing a Chart's Source Data
- Changing a Chart Type and Working with Pie Charts

Editing and Managing Cell Data

- Entering Date Values and using AutoComplete
- Editing, Clearing, and Replacing Cell Contents
- Cutting, Copying, and Pasting Cells
- Moving and Copying Cells with Drag and Drop
- Collecting and Pasting Multiple Items
- Using the Paste Special Command
- Inserting and Deleting Cells, Rows, and Columns
- Using Undo, Redo, and Repeat
- Checking Your Spelling
- Finding and Replacing Information
- Inserting Cell Comments

Advanced Functions

- Working with the Forms Menu
- Sorting, Subtotaling & Filtering Data
- Copy & Paste Filtered Records
- Using Data Validation

Creating Charts

- Adding Titles, Gridlines, and a Data Table
- Formatting a Data Series and Chart Axis
- Using Fill Effects

STATISTICS

Module 2 (30 hours)

R programming fundamentals

- Data types in R
- Functions and arguments
- Manipulating Data
- Data transformation with R - the Dplyr package
- Building a histogram, bar chart, box and whiskers plot with ggplot2

Descriptive Statistics

- Measures of central tendency (mean, median, mode)
- Measures of dispersion (SD, variance, range, IQR)
- Symmetry/shape measures (skewness, kurtosis)
- Box plot and outliers
- Covariance and correlation

Probability

- Random experiments and events (mutually exclusive, joint, dependent, independent)
- Probability rules
- Bayes' theorem
- Probability distributions (types: discrete, continuous)

Statistics

- Variables (quantitative, categorical, discrete, continuous)
- Population, sample, sample size
- Data visualization basics and R code (histogram, bar chart, frequency distribution)

Sampling Techniques

- Probabilistic & non-probabilistic sampling
- Simple random, systematic, cluster, stratified, convenience, quota, snowball, judgement

Probability

- Binomial distribution
- Normal distribution (properties, Z table, empirical rule, central limit theorem)

Inferential Statistics:

- Introduction to inferential statistics
- Sampling techniques (probabilistic and non-probabilistic)
- Point and interval estimation

STATISTICS

Module 2 (30 hours)

Hypothesis testing

- Definition, need, significance level, null and alternative hypothesis.
- One/two-tailed tests, critical value, rejection region, Type I/II errors
- One sample tests (Z, t, proportion)

Multivariate Analysis

- Principal Component Analysis (PCA)
- Factor Analysis
- Cluster Analysis

Bayesian Statistics

- Bayesian inference
- Posterior distribution
- Bayesian hierarchical models
- Markov Chain Monte Carlo (MCMC)

Experimental Design

- Types of experiments
- Randomized designs
- Matched-pair and Block designs
- Factorial designs
- Experimental units
- Control and treatment groups

Time Series Analysis

- Stationarity and Autocorrelation
- Forecasting methods

Linear Algebra

- Vectors (plotting, norm, addition, scalar multiplication, dot product, projection)
- Matrices (indexing, types, addition, multiplication, transpose, determinant, trace)

SQL

Module - 3 (14 hours)

SQL and RDBMS

- RDBMS And SQL Operations.
- Single Table Queries - SELECT, WHERE,
- ORDER BY, Distinct, And, OR
- Multiple Table Queries: INNER, SELF,
- CROSS, and OUTER, Join, Left Join, Right
- Join, Full Join, Union

NoSQL, HBase & MongoDB

- NoSQL Databases
- Introduction to HBase
- HBase Architecture, HBase
- Components, Storage Model of HBase
- HBase vs RDBMS
- Introduction to Mongo DB, CRUD
- Advantages of MongoDB over RDBMS

Programming with SQL

- Mathematical Functions
- Variables
- Conditional Logic
- Loops
- Custom Functions
- Grouping and Ordering

Advance SQL

- Advance SQL Operations
- Data Aggregations and summarizing the data
- Ranking Functions: Top-N Analysis
- Advanced SQL Queries for Analytics

JSON Data & CRUD

- Basics and CRUD Operation
- Databases, Collection & Documents
- Shell & MongoDB drivers
- What is JSON Data
- Create, Read, Update, Delete
- Finding, Deleting, Updating, Inserting Elements
- Working with Arrays
- Understanding Schemas and Relations

Programming with SQL

- Partitioning
- Filtering Data
- Subqueries

SQL

Module - 3 (14 hours)

Assignments

- Working with multiple tables
- Practice Joins, Grouping and Subqueries
- Using GROUP BY and HAVING Clauses
- Practice Aggregation Queries

MongoDB

Module - 04 (14 hours)

Introduction to MongoDB

- What is MongoDB
- Characteristics and Features
- MongoDB Ecosystem
- Installation process
- Connecting to MongoDB database
- Introduction to NoSQL
- Introduction of MongoDB module
- What are Object Ids in MongoDB

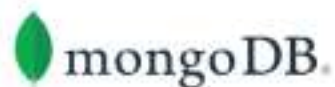
Assignment

- Obtain the data in the format you want by formulating queries that are both effective and high-performing.

MongoDB (Advance)

- MongoDB Use cases
- MongoDB Structures
- MongoDB Shell vs MongoDB Server
- Data Formats in MongoDB
- MongoDB Aggregation Framework
- Aggregating Documents
- Working with MongoDB Compass & exploring data visually
- Understanding Create, Read, Update, Delete
- Schemas & Relations
- Document Structure
- Working with Numeric Data
- Working on Scheme Designing

Tools covered



TABLEAU

Module 1 (24 hours)

Introduction to Tableau

- Overview of Tableau and its key features
- Introduction to data visualization concepts and techniques
- Understanding the Tableau interface and its main components

Creating basic visualizations using Tableau, including

- Bar chart
- Line chart
- Scatter plot
- Heat map
- Different chart types and features in Tableau, such as:
- Tree maps
- Bubble charts
- Waterfall charts
- Applying best practices for formatting, labeling, and annotations in Tableau

Forecasting and Clustering in Tableau

- Using forecasting and clustering techniques in Tableau

Connecting to Data Sources

- Connecting to different data sources and importing data into Tableau
- Working with different data types and formats
- Cleaning and transforming data in Tableau
- Creating Visualizations in Tableau

Visual Analytics in Tableau

- Understanding visual analytics concepts and techniques
- Sorting and grouping data in Tableau
- Using sets and set actions in Tableau
- Filtering data in Tableau, including interactive filters

Forecasting and Clustering in Tableau

- Creating calculated columns and using them in visualizations, such as: Histograms, Box plots
- Using Tableau's trend lines to analyze data

TABLEAU

Module 1 (24 hours)

Dashboard and Stories in Tableau

- Creating interactive dashboards in Tableau
- Using sheets and objects to design effective dashboards
- Adding filters, legends, and quick filters to dashboards
- Creating stories in Tableau to present data in a narrative format

Mapping in Tableau

- Using Tableau's mapping capabilities to visualize data on maps
- Plotting latitude and longitude data using Tableau maps
- Creating custom geocoding in Tableau
- Creating polygon maps and using WMS and background images for maps

PowerBI

Module 2 (30 hours)

Introduction to Power BI

- What is Power BI and why use it?
- Getting familiar with the Power BI interface
- Understanding data sources and connections

Data Visualization and Exploration

- Creating basic charts (bar, line, pie, etc.)
- Enhancing visualizations with formatting and design
- Using interactive features (filters, slicers, drill down/up)
- Creating custom visuals with Power BI visuals marketplace

Power BI Service and Collaboration

- Publishing reports to the Power BI service
- Sharing and collaborating with others
- Creating and managing workspaces
- Using Power BI mobile app

Data Transformation and Modeling

- Importing and cleaning data
- Transforming data with Power Query Editor
- Creating calculated columns and measures
- Creating relationships between tables

Advanced Analytics with DAX

- Understanding DAX formulas and functions
- Creating complex calculations and expressions
- Using time intelligence functions

Power BI Integration with other tools

- Integrating Power BI with Excel
- Using Power BI with SharePoint and Teams
- Connecting to other data sources (Azure, SQL Server, etc.)

DATA SCIENCE & AI

Module 1 (30 hours)

Introduction to Data Science and AI

- Definition, history, and applications.
- Key components of Data Science and AI (data, algorithms, computing power).
- Popular programming language (R) and development tools (Jupyter Notebook, Spyder)

Natural Language Processing (NLP)

- Text processing techniques (tokenization, stemming, lemmatization).
- Sentiment analysis, document classification, and information retrieval

Popular ML Libraries

- scikit-learn, XGBoost, LightGBM, TensorFlow, Keras, PyTorch.
- Model optimization techniques (Grid search, Random search, Bayesian optimization)

Machine Learning Fundamentals

- Supervised, unsupervised, and reinforcement learning.
- Bias-variance tradeoff, overfitting, and underfitting.
- Model selection and evaluation metrics (accuracy, precision, recall, F1 score, ROC curve, AUC).
- Hyperparameter tuning and model optimization techniques

Advanced NLP Techniques

- Named Entity Recognition (NER), Topic Modeling, Text Generation.
- Pre-trained language models (BERT, GPT, XLNet) and Transfer Learning in NLP

Tools covered



Deployment AWS+Azure

Module - 2 (10 hours)

Introduction to AWS and Azure Machine Learning Services

- Overview of AWS SageMaker and Azure Machine Learning
- Key features and benefits of using these platforms
- Understanding different types of machine learning algorithms and use cases

Data Preparation and Feature Engineering

- Understanding the data requirements for machine learning models (e.g. structured vs unstructured data, data size, data quality)
- Data cleaning and preprocessing techniques (e.g. missing value imputation, feature scaling, encoding categorical variables)
- Feature selection and engineering techniques (e.g. PCA, feature importance)

Setting up the Environment

- Creating AWS and Azure accounts
- Configuring the required tools and SDKs (e.g. AWS CLI, Azure CLI, Azure PowerShell)
- Understanding the infrastructure requirements for training and deploying models (e.g. EC2 instances, GPU instances, Azure ML Compute)

Model Training and Evaluation

- Choosing the right machine learning algorithm and model (e.g. regression, classification, clustering)
- Training models using AWS SageMaker and Azure Machine Learning (e.g. using built-in algorithms, custom code)
- Evaluating model performance and tuning hyperparameters (e.g. cross-validation, hyperparameter optimization)

Deployment AWS+Azure

Module - 2 (10 hours)

Model Deployment and Management

- Deploying trained models on AWS SageMaker and Azure Machine Learning (e.g. creating endpoints, batch inference)
- Monitoring model performance and managing versions (e.g. model drift, A/B testing)
- Integration with other services and applications (e.g. AWS Lambda, Azure Functions)
- Feature engineering techniques (e.g. PCA, feature importance)

Advanced Topics in Machine Learning on AWS and Azure

- Deep learning techniques and architectures (e.g. neural networks, convolutional neural networks, recurrent neural networks)
- Natural Language Processing (NLP) use cases (e.g. text classification, sentiment analysis, language translation)
- Understanding the costs and pricing models for machine learning on AWS and Azure (e.g. instance pricing, storage pricing, model deployment pricing)

Real-time Projects

1

Domain: BFSI



Learn and develop classification techniques for the digital transformation of banking

JPMorgan offers tax-friendly insurance choices. You can help them forecast insurance premiums. Targeted marketing using your random forest algorithm skills can help obtain better premium values.

Data Analytics, Matplotlib, Logical Regression

2

Domain: Media



Building a content recommendation model on the basis of regional viewer categorization

Netflix is a global entertainment video streaming site. They offer content in various regional languages. Build a local recommendation engine for Netflix customers residing in south Bangalore on their weekend and weekdays activities, utilizing NLP.

Data Analytics, Matplotlib, Logical Regression

3

Domain: Transportation



Reduction of waiting time via a highly precise forecasting model

Make a demand forecasting model based on specific time period rider demands. Such a model will help both riders and cab drivers to ensure the least possible waiting time. You can include measures like latitude and longitude identification.

Machine Learning, Hadoop, Time Series Analysis

4

Domain: Oil, Gas and energy



Understanding in-depth about logging while drilling (LWD) technique

Saudi Aramco company is working on the development of high-efficiency drilling models. Use the bright sides of big data analytics to identify the most cost-effective and highly productive drilling sites.

Matplotlib in Python, Big Data

Real-time Projects

5

Domain: HR



Career progression planning of employees with workforce defections & efficiency

IBM intends to boost its HR department by identifying employees' masked inconsistency. They need models to identify the graphical variations in their 14000+ employees' performances. Help them build models with your regressions and other ML abilities.

Machine Learning, Python, SQL, PySpark

6

Domain: Marketing



Descriptive study of trends and irregularities with prediction analysis for conversion

Swiggy seeks a broad marketing campaign. But they need automated keyword generation tools & proper message preparation and delivery of the same to the right audience at the right time. Help them with text analytics and NLP-based keyword research.

Exploratory Data Analysis, Big Data, NLP

7

Domain: Sales



Forecasting future sales with trends and price maximization

BMW customers can sell old vehicles, but rivals provide superior resale prices. BMW's data science-powered software will deliver the greatest market value for used vehicles based on Km travelled, daily price changes, production dates, etc. Such tasks build analytical abilities.

Scikit-learn, XG Boos, Customer Segmentation

8

Domain: Healthcare



Understanding covid-19 cases and fatality rate by time series forecasting

Samsung will launch a new healthcare app soon. The key goal of this app is an accurate human activity tracking and providing relevant health-related recommendations. Continuous analysis of a massive amount of mobile data is required for such an app.

Supervised Machine Learning, Python (Pandas Library)

Real-time Projects

Domain: Telecom



Churn forecasting for the telecom industry using R programming with Machine Learning

The goal of this project is to design a precise customer churn prediction model. Based on the same, Jio can identify the exact reason for customer dissatisfaction and work accordingly.

R Programming, Decision Tree, Data Preprocessing

Domain: E-comm



Recommendation system with customer lifetime value analysis (CLV)

Amazon wants to find the most successful electronics. Live consumer reviews are needed. Using data visualisation, help regenerate consumer insights from ongoing and current reviews.

Deep Neural Network, Machine Learning, MongoDB

Domain: Manufacturing



Condition-based preventative maintenance and fault prediction in depth

This project helped BOSCH to predict their internal failures by production line dataset analysis. But still, they are struggling to predict automated faults in their assembly stage. Help them by building more advanced predictive models for assembly stage monitoring.

ML (Reinforcement Learning), Data Warehousing (Tableau)

Domain: Supply chain



Automated inventory monitoring for supportable supply chain management

An automated inventory management system will keep track of stock levels and upcoming orders. In addition, you can contribute to DataCo's intelligent supply chain software generation project by using ML algorithms and R programming skills.

Python, PowerBI, Machine Learning



Contact Us

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with expert**

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