



# BADATYA

Join The Crowd to Standout!!!



## BUSINESS ANALYSIS

"Information is  
the oil of the 21st Century,  
and analytics is  
the combustion engine."

- Peter Sondergaard

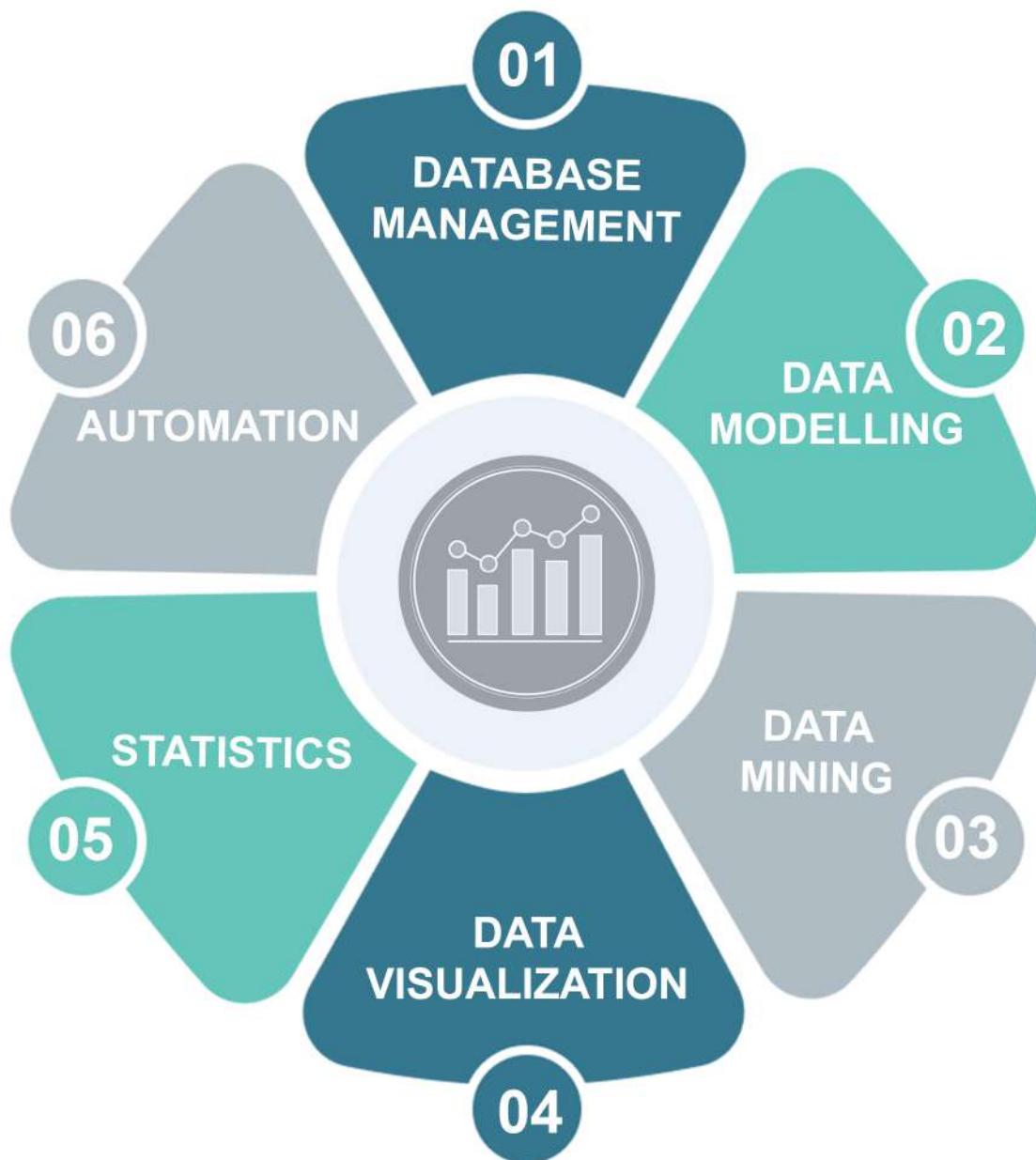


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# BUSINESS ANALYSIS

A skilled Business Analyst identifies unidentified needs in an organisation. Business analysis is used to discover, express, and assist the need for change in how businesses operate. As business analysts, you recognize and categorize the solutions that will maximize the value offered to stakeholders by a firm.

## BUSINESS ANALYSIS comprises of:



## JOB PROFILES for Business Analysis graduates include:

- Business Analyst
- Business Intelligence Analyst
- Business Consultant
- Business Project Manager
- Operations Specialist
- Business Systems Architect
- Business Systems Analyst
- Financial Analyst

# BUSINESS ANALYSIS

## TOOLS:

Python

VBA

Numpy

Panda

Visual Studio

GitHub

Docker

Google Sheets

SQL

Excel

Power BI

Tableau

## Salary:

The average salary for a Business Analyst in India is Rs. 761,327.



## Course Overview:

01

Introduction to Business Analysis

02

Business Analysis with Excel

03

Data Visualization using Tableau

04

Data Visualization using Power Bi

05

Data Analysis with Python

06

Data Visualization with Python

07

Domain Exposure

08

Mathematical Business Optimisation

# BUSINESS ANALYSIS

## Popular Skills and Market Demand

BUSINESS ANALYSIS

OPERATIONS ANALYSIS

MICROSOFT EXCEL



STATISTICAL ANALYTICS

DATABASE MANAGEMENT

SR. BUSINESS ANALYST



## Why choose Business Analysis?

- Flexible Profile - A Business Analysts' job profile has a wide scope allowing consistent room for growth.
- Role of a Business Analyst is constantly evolving and growth opportunities in the field are limitless.
- Job opportunities are available in abundance that are estimated to increase by 19% in the next 10 years.
- Autonomous work environment that allows opportunity to explore creative ideas.

# BUSINESS ANALYSIS

## WHY CHOOSE BADATYA?

Meticulously designed industry - oriented course curriculum.



Industry experienced and qualified trainers.



Theoretic and practical training,  
50+ case studies.



100% Placement Assurance



Help with Interview Preparation and Profile Building



Flexible class schedules and customisable courses



## FAQ's

### How is business analysis different from data analysis?

Through data analysis, business analysts assist organizations in enhancing their operations, goods, services, and software. These adaptable employees operate in both the business and IT sectors to close the gap and boost productivity.

### What Will I Receive Post Completion Of My Course at Badatya ?

After completing the course, the individual shall receive a Course Completion Certificate by Badatya to vouch for the skills and knowledge the student has gained in the course term.

# BUSINESS ANALYSIS- CURRICULUM

## Module 01 – Introduction to Business Finance and Analysis

- Introduction to Business Finance .....
- Introduction to Business Analysis .....
- Fundamentals of Finance .....
- Working Capital Management .....
- Capital Budgeting .....
- Capital Structure .....
- Marketing and CRM .....
- Core Concepts of Marketing .....
- Customer Life Time Value .....

## Module 02 – Business Analytics with Excel

- Introduction to Ms Excel .....
- 70+ Functions and Formulas .....

  - Financial .....
  - Logical .....
  - Text .....
  - Date and Time .....
  - Lookup and Reference .....
  - Math and Trig .....
  - Statistical .....
  - Engineering .....
  - Cube .....
  - Information .....
  - Compatibility .....
  - Web .....

- Data Validation .....
- Data Validation using formulas .....
- Business Analysis using formulas .....
- Conditional Formatting .....
- Conditional Formatting using formula .....
- Analysing Data .....
- Analysing Data with Pivot Tables .....
- Charts & Dashboard .....
- Business Analytics with Excel .....
- Business Analysis Using Goal Seek, Scenario Manager & Statistics .....

## Module 03 – Data Visualization using Tableau

- Introduction to Data Visualization .....
- Introduction to Tableau .....
- Core Tableau in Topics .....
- Introduction to Charts and Dashboards .....

# BUSINESS ANALYSIS- CURRICULUM

- Creating Charts in Tableau .....
- Working with Metadata .....
- Filters in Tableau .....
- Applying Analytics to the worksheet .....
- Dashboard in Tableau .....
- Dashboard Designs and Principles .....
- Advanced design components/ principles : Enhancing the power of dashboards .....
- Special chart types .....
- Descriptive statistics, Dimensions and Measures .....
- Visual Analytics – Story telling through Data .....
- Modifications to Data Connections .....
- Introduction to Level of Details in Tableau (LODS) .....
- Case Study: Hands on using Tableau .....
- Integrate Tableau with Google Sheets .....
- Publish dashboards .....

## **Module 04: Data Visualization using Power BI**

- Introduction to Business Intelligence (BI) .....
- Introduction to Power BI .....
- Power BI Components .....
- Power BI vs Tableau .....
- Data Extraction .....
- Using files from 99+ data sources .....
- Using SaaS connectors .....
- Extracting data from folders and databases .....
- Visualization Charts in Power BI .....
- Types of Charts .....
- Matrixes and Tables .....
- Slicers and Map Visualizations .....
- Gauges and Single Number Cards .....
- KPI Visuals .....
- Z-order .....
- Grouping and Binning .....
- Exploring Live Connections to Data Sources .....
- Connecting Directly to SQL Server .....
- Import Power View and Power Pivot .....
- Data Gateways .....
- Direct Query vs. Import Connectivity modes .....
- Connecting Power BI in Excel .....
- Connecting Power BI with SQL Server Database .....
- Power BI Report Server .....
- Power BI Report Server vs. Power BI Service .....

# BUSINESS ANALYSIS- CURRICULUM

- Paginated Reports .....
- Row Level Security .....
- R & PYTHON in Power BI .....
- Create R Scripts for BI .....
- Python Scripts in BI .....
- Python integration with Power BI .....
- Connecting R and Python in Power BI .....
- Using R and Python for data analysis .....
- Advance Analytics in POWER BI .....
- Power BI Service .....
- Publish BI Reports .....

## Module 05 – Data Analysis with Python

- Importing Datasets .....
- Introduction to Probablity .....
- Cleaning the Data .....
- Preparing the Data .....
- Summarizing the Data Frame .....
- Model Development .....
- Model Evaluation .....
- Sampling and sampling distributions .....
- Hypothesis testing .....
- Two way ANOVA and linear regression .....
- Linear regression and multiple regression .....
- Concepts of MLE and Logistic regression .....
- ROC and Regression Analysis Model Building .....
- c2 Test and introduction to cluster analysis .....
- Clustering analysis .....
- Classification and Regression Trees (CART) .....

## Module 06 - Data Visualization with Python

- Introduction to Visualization Tools .....
- Getting Started With NumPy .....
- Learn how to import NumPy .....
- Learn how to use NumPy to create and manipulate arrays .....
- See NumPy's performance benefit .....
- Read csv files into NumPy .....
- Select items in NumPy arrays .....
- Calculate basic statistics with NumPy .....
- Basics of the Pandas Library .....
- Load data into a DataFrame .....

# BUSINESS ANALYSIS- CURRICULUM

- See the difference between DataFrames and series .....
- Learn DataFrame methods for basic statistics .....
- Manipulating Data in Pandas .....

  - Apply functions on DataFrames .....
  - Concatenate DataFrames together .....
  - Select subsets of DataFrames .....
  - Learn the limitations of human memory .....
  - See how data can be plotted on different dimensions .....
  - Learn some important caveats .....
  - Load data into Pandas .....
  - Plot different values as line curves .....
  - Sort by date to clean up lines .....

- Multiple Plot .....

  - Make non-uniform subplots with subplot2grid .....
  - Add twinned axes for different ranges .....
  - Learn about color axes labels for clarity .....

- Box Plots to Find Distributions and Medians .....

  - Generate box plot to show statistical information .....
  - Add multiple groups to compare statistics .....
  - Annotate box plots with additional information .....
  - Use matplotlib style sheets .....
  - Explain LaTeX and rcParams for fonts .....
  - Configure the legend .....

- Using the Seaborn Package .....

  - Plot distributions with Seaborn .....
  - Plot 2D/Joint distributions in Seaborn .....
  - Understand Seaborn's smart theming .....

- Regressions and Statistics with Seaborn .....

  - Learn to make heat maps with Seaborn .....
  - Generate regression plots .....
  - Explore different options and varieties of regression plots .....

- Comparisons with Conditional Plots .....

  - Compare distributions using violin and swarm plots .....
  - Make conditional plots with pair plot .....
  - Add regressions to conditional plots .....

# BUSINESS ANALYSIS- CURRICULUM

- Visualisation of Maps and Geographical Data .....

  - Explore the matplotlib Basemap class .....
  - Load map data .....
  - Plot maps .....
  - Translation between spherical and Cartesian coordinates .....
  - Map projections for projecting into a plane .....
  - Understand what map projections Basemap provides .....
  - Plot parallels and meridians .....
  - Add a scale to the maps .....
  - Change the background and resolution of maps .....

## Module 07 – Domain Exposure

- Marketing and Retail Analytics .....
- Marketing and Retail Terminologies .....
- Customer Analytics .....
- KNIME .....
- Retail Dashboard .....
- Customer Churn .....
- Association Rules Mining .....
- Web and Social Media Analytics- Introduction .....
- Web Analytics – Understanding the Metrics .....
- Basic and Advance Web Metrics .....
- Google Analytics .....
- Campaign Analytics .....
- Text Mining .....
- Finance and Risk Analytics- Introduction .....
- Why Credit Risk? .....
- Comparison of Credit Risk Models .....
- Overview of Probability Default (PD Modelling) .....
- PD Models - Types .....
- Market Risk .....
- Value at Risk .....
- Supply Chain and Logistics Analytics .....
- Supply Chain – Introduction .....
- RNNs and its Mechanisms .....
- Designing Optimal Strategy using Case Study .....
- Inventory Control and Management .....
- Inventory Classification .....
- Inventory Modeling .....
- Costs involved in Inventory .....
- Economic Order Quantity .....
- Forecasting .....

# BUSINESS ANALYSIS- CURRICULUM

## Module 08 – Mathematical Optimization for Business Problems

- The Big Picture .....

  - What is Operations Research? .....
  - What is Optimization? .....
  - Optimization Models .....

- Linear Programming .....

  - Introduction to Linear Programming .....
  - Writing the model .....
  - Finding a solution .....
  - From feasibility to unboundedness .....
  - Algorithms for Solving Linear Programs : Part 1 - The Simplex and Dual Simplex Algorithm .....
  - Algorithms for Solving Linear Programs : Part 2 - The Simplex and Barrier methods .....

- Network Models .....

  - Introduction to Network Models .....
  - The Transportation Problem .....
  - The Trans-shipment Problem .....
  - The Assignment Problem .....
  - The Shortest Path Problem .....
  - Critical Path Analysis .....

- Beyond simple LP .....

  - Nonlinearity and Convexity .....
  - Piecewise Linear Programming .....
  - Integer Programming .....
  - The Branch and Bound Method .....
  - Quadratic Programming .....

- Modelling Practice .....

  - Modelling in the Real World .....
  - The Importance of Sparsity .....

## Module 09 – Business Analyst Capstone

The Business Analyst Capstone project gives you an opportunity to revise and implement all the skills that you have learnt throughout this course. You will learn how to solve real-world, industry aligned problems with dedicated mentoring sessions.

# ABOUT BADATYA



1st Rank Institute  
in Delhi NCR



59,000+ Students



90% Students Enrol  
from references



Certified Industry  
Experts



500+ Training  
Partners



300+ Recruiting  
Partners

## Year wise Placement



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