

Become a *Data Analyst*



Data Analytics Syllabus

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Career Training

Our 7-month intensive training program will equip you with the essential Data Analyst skill set and get you job-ready. You will learn the fundamentals of Data Analytics, get hands-on experience, and develop a stellar portfolio with real-world projects that are sourced from the world's leading tech companies.

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Career Accelerator

After the 7-month program, you will join the Career Accelerator until you find a job. You will focus on searching for a job in Data Analytics while developing Mastery Projects solving real-life business problems. You will continue to develop your technical skills and gain more hands-on experience while learning the art and science of getting hired in tech.

Endless Career Growth

Our goal is to ensure that you build an inspiring career. This means we're here for you even after being hired for your first role. As our graduate, you will become a part of our vibrant alumni community, gain access to exclusive events and workshops, and get the undivided support of our team whenever you start thinking about the next step in your career journey.

Tech Foundations

During the first unit of our program, we will lay the groundwork with the tech fundamentals you need to succeed. Learn programming with Python, practice algorithmic thinking, and complete your first coding project. In addition, this unit will teach you time management skills, touch typing, and how to use keyboard shortcuts to work effectively.

Sprint 1 Programming with Python 1

Sprint 2 Programming with Python 2

Sprint 3 Your first coding project

Sprint 4 Practice Week

Concepts covered:

- Python
- Problem Solving
- Algorithmic Thinking
- Time Management
- Touch Typing
- Keyboard Shortcuts

Basic & Intermediate SQL

Modern Data Analysts work with bigger datasets than ever before and SQL is the main programming language to work, translate, and aggregate data with. Think of SQL (Structured Query Language) as Excel on steroids, but with code. In DA103, you will learn how to write SQL queries to retrieve, combine and aggregate data. Each Sprint you will tackle a new business case based on real-life use cases and applications, and we will highlight the elements that will most likely come up in interviews as well.

Sprint 1 Databases, Selecting and Filtering Data from Tables

Sprint 2 Aggregating Data to Extract Business Insights

Sprint 3 Combine Data from Tables Using JOINS

Sprint 4 Practice Week

Concepts covered:

- SQL Query Structure
- Database types
- Data types
- Aggregation Functions
- Joins
- Unions
- Filtering data

Advanced SQL

In this unit, we will continue and build on top of the SQL skills we covered in the previous unit. You will learn how to combine data even when it is stored in many different tables. Additionally, you will learn how to clean real-life data that is unorganized and incomplete. By the end of this unit, you will become interview-ready and be able to answer common SQL interview questions, and pass tests that you can expect to receive during your Data Analyst interviews!

- Sprint 1** Combining Data with Multiple Joins
- Sprint 2** Cleaning and Analyzing Messy Data
- Sprint 3** Creating and Using Temporary Tables
- Sprint 4** Practice Week

Concepts covered:

- Multiple Joins
- Table Modifiers
- Multiple Join Keys
- Coding Best Practices for Advanced Code
- String Functions
- Date functions
- REGEXP
- WITH statements and CTEs
- WINDOW functions
- PIVOT/UNPIVOT

Data Storytelling

Knowing how to tell a coherent and convincing story when communicating your analysis results is key to your success as a data analyst. In this unit, you will work on your storytelling skills while learning data visualization in Excel and Tableau, a widely-used BI (Business Intelligence) tool. You will also learn the design principles behind good data visualizations. By the end of this unit, you will be able to communicate your analysis results in a presentation format and create a beautiful and self-explanatory dashboard.

Sprint 1 Data Visualization Fundamentals

Sprint 2 Visualization with Excel

Sprint 3 Data Analysis in Tableau

Sprint 4 Practice Week

Concepts covered:

- Types of Data Visualizations
- Design Principles
- Master Excel Basics
- Visualization with Excel
- Introduction to Tableau
- Trend & Forecast Lines
- Dashboards & Stories

Analytical Thinking

In this unit, we focus on developing your analytical thinking skills. You will learn how to critically analyze business problems, clean and preprocess data, design and analyze experiments, and communicate data analysis results in a clear and compelling manner. By the end of this unit, you will have a deeper understanding of analytical thinking and how to apply it in a business context.

- Sprint 1** Critical Thinking and Problem-Solving in Business
- Sprint 2** Data Cleaning and Preprocessing Principles
- Sprint 3** Experiment Design and Hypothesis Testing
- Sprint 4** Communicating Data Analysis Results

Concepts covered:

- Critical Thinking
- Problem-Solving
- Experimental Design
- Hypothesis Testing
- Storytelling
- Communication Skills

Mastery Project

This project is the culmination of all the skills and knowledge you have acquired throughout the Data Analytics Program. It presents an excellent opportunity to showcase your abilities and demonstrate how they all fit together. By connecting the dots, you will see how each individual and tech-tool component contributes to the project's overall success.

Moreover, this project offers a chance to gain practical experience and apply what you have learned in a real-world setting. This will enhance your understanding of the subject matter and increase your confidence in your abilities. Ultimately, this project will be a valuable learning experience that will aid your personal and professional growth.

Sprint 1 Mastery Project

Sprint 2 Mastery Project

Sprint 3 Mastery Project

Sprint 4 Practice Week

Career acceleration to land your first Data Analytics role, and beyond.

During the Career Accelerator, you will be actively looking for your first full-time Data Analytics role. You will be learning everything you need to know about how to get hired for your dream job at a top tech company, while continuing to develop your technical and soft skills. Our goal here is to make you the ideal candidate for the role you are after, and to help you start your career as early as possible.

Mastery Projects

The Career Accelerator features Mastery Projects that use multiple skills and tools to tackle real-world business problems. This will help you gain valuable hands-on experience, improve your skills, and acquire advanced skills and methods. Each Mastery Project you complete will be added to your data analytics portfolio, bringing you one step closer to being hired.

Each project will combine several core skills and business concepts that you will learn during your core training. This includes SQL, Spreadsheets, Tableau, Python, A/B Testing, Funnel Analysis, and more.

Career Fundamentals

In addition to practicing your tech skills, the Career Accelerator will equip you with the necessary skills and strategies to successfully navigate the job market and land your first job in the field.

We'll cover everything you need to learn to get and pass interviews.

Get Interviews:

- Resume and LinkedIn optimization
- How companies make hiring decisions
- Effective application strategies
- Networking (online and offline)

Pass Interviews:

- Interview questions practice
- Interview Preparation and best practices
- HR interviews
- Home assignments

