## **Syllabus**

## Business Intelligence Analyst

## **Contents**

What is a BI Analyst?	02
Course Structure	03
Module 1. Spreadsheets	04
Module 2. Business Analytics	05
Module 3. Data Visualization and Storytelling	06
Module 4. Applying Analytics for the Final Project	07
Employment Preparation	08

# What is a Business Intelligence Analyst?

The modern world is all about business and data — they're nearly impossible to escape! Now, more than ever, it's vital for companies to make sense of the data they collect.

Business intelligence analysts turn raw data into valuable information, support decision-making processes in businesses, identify and visualize trends and researches, and gather insights across industries. They mostly extract data using SQL, perform and supply data in spreadsheet software like Excel and Google Sheets, and create dashboards with tools like Tableau. Bl analysts communicate daily with clients and stakeholders to understand their issues and provide optimal solutions.

There are over 18k business intelligence analyst jobs on Glassdoor as of November 2022.

According to the U.S. Bureau of Labor Statistics, the number of job openings for analysts is expected to grow by 23 percent between 2021 and 2031, significantly higher than the five percent average job growth projected for all jobs in the country.

## Course Structure

Your journey will be divided into sprints, two-to-three week-long work intensive periods grouped into thematic modules. Each sprint will have a particular learning objective, reinforced through quizzes and tasks. Most tech companies work in this format, so you will come prepared. At the end of the sprint, you will take the skills you've learned and combine them with your existing skills to work on a project that will be assessed by industry experts.

We provide some rough time estimates to help you plan and manage your schedule, and we recommend spending around 20 hours per week studying. However, we understand that everyone has different commitments and people learn at different speeds. We also understand you may need a break at times, so we have some suggested breaks scheduled in too.

## **Spreadsheets**

Getting into the basics of analytics together with spreadsheets. This module will explore industry best practices for choosing and calculating the right metrics and how to efficiently execute an analysis using spreadsheets.

#### Sprint 1



### **Advanced Spredsheets**

- Fundamentals of Spreadsheets
- · Introduction to Spreadsheets
- Basics of Spreadsheets
- Spreadsheet Functions
- Data Cleaning
- Pivot Tables
- · Spreadsheet Best Practices
- Graphs and Charts
- Preparing for Your First Project (Soft Skills)

#### **Project:**

Analyze Airbnb Data to Identify Investment Opportunities

#### Total:

2 weeks

40 hours

## **Business Analytics**

Building an impactful analysis starts with understanding how to use SQL databases to access and filter data.

## Sprint 2 SQL Databases

- · What is SQL?
- Query Fundamentals
- Relationships Between Tables
- Functions
- Advanced Queries
- Creating Tables, Views and Temp Tables

#### **Project:**

- Filnal Project Prompt
- · Soft Skills

## Sprint 3



### **Business Analytics**

- Introduction to Business Analytics
- Metrics and Funnels
- Cohort Analysis
- Unit Economics
- User Metrics
- Soft Skills
- Strategic Problem Solving

3 weeks 60 hours

#### Total:

3 weeks 60 hours

# Data Visualization and Storytelling

An analysis is only effective when you can clearly communicate it to your stakeholders. This module will focus both on how to build interactive data visualizations in Tableau and Power BI and the best practices in developing persuasive stories for your presentations.

## Sprint 4 Data Visualization with Tableau

- Fundamentals of Tableau
- Building Charts
- · Making Interactive Charts

#### **Project:**

- Viz of the Day
- Creating Your Profile and Portfolio

## Sprint 5Storytelling with Data

- Introduction
- · Building Your Story
- Dashboards in Tableau
- · Tableau Stories
- · Presentation Best Practices

#### **Project:**

Analysis of Returns at Superstore

## Sprint 6 Power Bl

- Introduction to Power BI
- · Creating Charts
- · Building and Publishing Reports
- Overview of Advanced Features

#### Module 4

# Applying Analytics for the Final Project

After building a comprehensive set of skills for your data analytics toolkit, it's time to combine different techniques together to tackle larger projects. This module will focus on choosing the right combination of tools to accomplish a job. The final step in this program is a project where students can demonstrate mastery of data analytics.

## Sprint 7 Soft Skills

- How to keep your motivation
- · How to avoid burnout



## Sprint 8 Final Project

- Review of the Full Analytics Toolkit
- Comparing Tools and Choosing the Right Technique for the Job

#### **Externships**

+ 1-∞ real projects for your portfolio.

You'll gain confidence in solving work tasks that use a real company's data to provide them with valuable insights. Learn to communicate with clients, meet their expectations, exchange peer reviews with colleagues, and present results to the company.

- Assemble a portfolio project based on actual data
- Get a recommendation on LinkedIn by a real company
- Gain experience with freelance project workflow

## **Employment Preparation**

In addition to the main educational program, our career help is divided into four parts: the Career Prep Course, the Career Acceleration Program, Tech interview practice, and Apiary projects.

#### **Career Prep Course**

#### Dedicated course on the platform

This is a course devoted to preparing for life after Practicum. During this course, you'll learn how to create a resume, a LinkedIn profile, and a GitHub account, along with improving networking and interview skills. This course is self-paced and includes homework tasks. We'll also perform a review of your career resources.

- Compile a ready-to-use resume
- · Produce a job-ready portfolio
- · Launch your LinkedIn profile

#### **Career Acceleration Program**

## Dedicated course on the platform + online events and 1-1 coaching

Prepare for real-world interviews and gain experience through authentic practice. This program is designed to help you find a real job and also provides some work with technical skills.

- Attend mock interviews
- Receive 1:1 career coaching
- Prepare your job search strategy
- Get a bi-weekly review of your application funnel
- Write technical articles to exhibit your knowledge
- · Boost your soft skills
- Produce demo videos of your work
- Participate in extracurricular activities
- · Join the LinkedIn community

#### **Tech interview practice**

## An additional lesson to prepare for the technical part of a job interview.

In this lesson, students or graduates face a real-world case and will provide possible solutions to check the hypothesis. It's a great opportunity to refresh their knowledge and gain insight into similar cases.

- · SQL knowledge
- · Business-oriented thinking

10-20 hours in total

Up to 6 months after graduation

10-15 hours in total

# Learn 13 the job. © Get the job. ♦