Data Analyst Bootcamp

9 weeks | 299.5 clock hours | Monday through Friday

Program overview

The program will teach the data analyst to be able to acquire data from different sources, and to identify, analyze and interpret trends or patterns in complex data sets.

The data analyst will also learn:

- To filter and clean the data by reviewing computer printouts and reports
- Build and publish reports with Microsoft Power BI.
- The data analyst will have the ability to work with management to prioritize business information needs.

Curriculum by skill area

Modules are grouped by skill area so you can find what you need quickly. Every module description is included in full.

Collaboration and Process

3 modules

Source control, team process and project management

Git/GitHub	In this module, the student will learn the basics of source control management and how it is accomplished in a distributed environment.
Professional Scrum with AI	Scrum Framework: students dive into the Scrum software development framework, including roles and responsibilities, principles, artifacts, and events and time boxes, rules and customs.
Effective Project Management	Effective Project Management workshop is designed to completely cover the fundamentals of managing projects. It introduces you to more complex topics in project management while it deepens your understanding of planning and controlling processes. You will discover concepts, tools and ways to manage projects to achieve positive outcomes. You will apply these principles and techniques to sample projects and create links to your own projects.

Data Foundations

5 modules

Core concepts, requirements, databases and hosting

Data Literacy	Students learn terminology and fundamentals of data analysis. The principles learned here are necessary for tactical implementations in data analysis.
Intro to AI	Understand the core principles of AI, its technologies, and how they apply across industries to drive innovation and improve processes. • Practical Knowledge: Gain hands-on experience through accessible, real-world applications, ensuring you can implement AI solutions effectively. • Ready for AI-Driven Success: Build a strong foundation in AI, preparing you to navigate and thrive in an AI-driven world with the skills and confidence to contribute meaningfully.
Foundation of Business Analysis	This course gives a clear understanding and total immersion into all the facets of the business analyst role, including a thorough walk-through of the various domain/knowledge areas that make up the business analysis profession. You will try your hand at several business analysis techniques for eliciting, analyzing, and modeling requirements. Business analysis work performed in strategy analysis and solution evaluation is thoroughly presented and explored which is extremely valuable to both the beginner and the intermediate business analyst as these skills are typically less developed in the traditional BA.

SQL Database	The student will learn and practice the SQL Statements that every developer needs to retrieve and update data in a SQL Database; design databases like a DBA and implement them with SQL scripts using SQL Server Management Studio or the MySql Workbench; gain professional skills such as using views, stored procedures, and functions.
Hosting	The hosting topic reviews the multiple facets required to host. It includes: • Managing remote hosting via control panel • Creating and maintaining databases in the cloud

Excel Fundamentals

3 modules

Levels 1 to 3, from first workbook to automation and advanced formulas

Excel Level 1	In this course you will learn how to create spreadsheets and workbooks that you can use to store, manipulate, and share your data.
Excel Level 2	In this course you will get hands on experience with guided labs on how to organize table data, present data as charts, and enhance the look and appeal of workbooks by adding graphical objects.
Excel Level 3	This Microsoft Excel Level 3 course helps you get the most of your Excel experience. The ability to collaborate with colleagues, automate complex or repetitive tasks, and use conditional logic to construct and apply elaborate formulas and functions will put the full power of Excel right at your fingertips. The more you learn about how to get Excel to do the hard work for you, the more you'll be able to focus on getting the answers you need from the vast amounts of data your organization generates.

Data Analysis and Power BI

3 modules

Analyze, visualize and share what the data says

Data Analysis and Visualization	Technology and the data that it both collects and makes accessible is now interwoven with businesses and lives. The era of “big data” has exploded due to the rise of cloud computing, which provides an abundance of computational power and storage, allowing organizations of all sorts to capture and store data. Leveraging that data effectively can provide timely insights and competitive advantage. Analyzing data to find issues, insights and opportunities is now a critical part of many job roles. Beyond the analysis, data analysts in all job roles must be able to effectively present and communicate their findings in visually compelling ways.
Power BI Data Analyst	This course covers the various methods and best practices that are in line with business and technical requirements for modeling, visualizing, and analyzing data with Power BI. The course will show how to access and process data from a range of data sources including both relational and non-relational sources. Finally, this course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution.
Intro to DAX for Power BI	In this two-day course, students will be introduced to using Data Analysis Expressions (DAX), which is the expression language that is used to create custom calculations in the Power BI Data model. The course covers some of the theoretical underpinnings of the data model and DAX, but the emphasis is on using DAX to solve common business problems. Students will learn how to write their own calculated columns, measures, and tables, how to visualize the way Power BI computes DAX calculations, and how to troubleshoot custom code. This course involves discussion of concepts and definitions, demonstration of formulas, and guided hands-on activities.

Python and Machine Learning

3 modules

Programming and machine learning models

Python Beginner	Students will learn the fundamentals of programming with Python: Working with variables and strings, how to control the flow of a program with control structures, managing multiple variables in lists, tuples, sets, and dictionaries, coding functions and processing files.
Python Advanced	Students will learn object-oriented programming principles, create and use classes, magic methods, decorators, generators, and iterators. They'll also learn to use data classes, internet services, and basic web scraping.
Machine Learning	Students will build on their foundational Python and Data Science skills, using the Python programming language to develop and implement machine learning algorithms and models. Machine learning is a subset of artificial intelligence that involves the creation of systems that can learn from data and improve their performance over time without being explicitly programmed.

Outcomes and next steps

What students finish with, the support that gets them job ready, and how to get started.

Capstone Project

The Bootcamp Capstone project is a data analysis project that each student is required to complete and get certified in order to graduate from the bootcamp. This Project is comprehensive of all the skills learned in the bootcamp. Each student creates this project primarily in the last week of the bootcamp, working in and out of the classroom.

Career Services

Our MAX Career Manager works with the students on a group and individual basis to prepare them for their job search. Activities include seminars on creating Linked In profiles, creating an attention-getting resume, interviewing skills plus an opportunity to hear from bootcamp graduates about what the day-to-day world of a data analyst will be like. Interactive sessions are held so the students can practice for interviews. One-on-one meetings are held to fine-tune the student's resume and job search strategy.

Program details

Before you start

- Meet with MAX's agent to discuss your career.
- Take the applicable aptitude test.
- Complete all required paperwork by date defined by agent.
- Basic Computer Knowledge
- Typing Test
- Knowledge of Word and Excel
- Windows Essentials
- File Management

To graduate

Upon completion of your training sessions, you will have thirty (30) days to complete 80% of required classroom work, exercises and projects.

Roles you can pursue

- Junior Data Analyst
- Data Analyst
- Marketing Analyst
- Data Visualization Specialist
- Business Intelligence
- Developer Data Analyst
- Power BI Data Analyst

Workforce funding options

We coordinate national, state, and county workforce investment funding to help people upskill, reskill, and change their professional trajectory. Talk to an advisor today about workforce funding for individuals and organizations.

Ohio TechCred | Ohio IMAP | WIOA

Why a MAX bootcamp



Custom Curriculum

We have ready-to-deliver bootcamps in subjects like Data Analytics, Software Developer, Agile Business Analysts and IT Support. We can also create multi-week bootcamps from any of our available courses in our catalog.



Fully Immersive

Multi-week bootcamps allow students to dedicate consecutive days to being immersed in the curriculum, gain hands-on experience, and gain confidence in their capabilities.



Dedicated Time

Multi-week bootcamps give students a break from daily work tasks and allow the class to become their work. The dedicated time can create an epic skills shift that can support the promotion of a dedicated employee.



Instant Impact

Our bootcamp reviews are full of praise from employers for students' ability to immediately impact their organizations, and the investment in employees shows instant ROI while also building an upskilling culture.

Talk to an advisor about start dates and workforce funding. **513.322.8888 | maxtrain.com**