Data Analytics Bootcamp Syllabus

16-Week Certificate Course

Brought to you by your institution in partnership with:

Upright

Upright Education helps people build in-demand skills by teaming up with colleges and mission-driven organizations to offer practical, career-focused training programs built for today's job market.
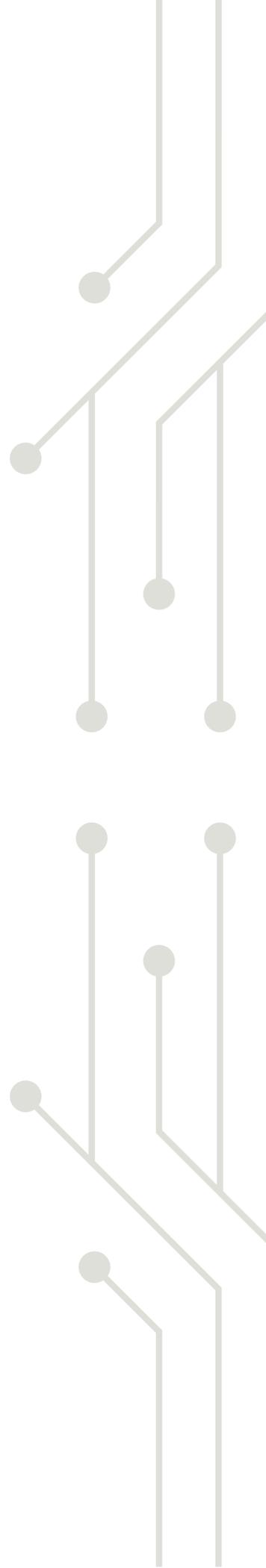
Overview

What is Data Analytics?

Data Analytics is the science of examining raw data to uncover trends, draw conclusions, and support decision-making. It involves collecting, cleaning, transforming, and modeling data to extract meaningful insights that drive business strategy and performance. Whether you're analyzing customer behavior, financial performance, or operational efficiency, data analytics empowers professionals to make smarter, evidence-based decisions.

The Increasing Demand for Data Analytics Skills

As organizations generate more data than ever before, the demand for professionals who can interpret and act on that data is rapidly growing. Data analytics skills are essential across industries—from finance and healthcare to tech and education. Entry-level roles like data analyst and business analyst offer strong starting salaries and clear paths for growth. This program is designed to help you capitalize on this demand and step confidently into a high-impact, high-opportunity career.

Learning Outcomes

By completing this certificate program, you will:
- Analyze and visualize data using Excel, Python, and Tableau
- Write SQL queries to extract and manipulate data
- Clean, structure, and interpret datasets for business insights
- Present findings through effective storytelling and dashboards
- Build a job-ready portfolio and prepare for the data job market

Resume-Boosting Tech Stack

Python, SQL, Excel

You'll learn in-demand tools like Python, SQL, Tableau, and Excel—giving you a tech stack that matches what hiring managers are looking for in analysts today.

Program

Course Structure

This is a **16-week, part-time program** built for working adults and career changers.

The course meets twice per week in the evenings on **Mondays & Thursdays from 6 PM to 9 PM EST.**

Expect to spend **20 to 25 hours per week** on a mix of live instruction, guided projects, independent study, and hands-on labs.

Each week includes:
- Two live sessions led by expert instructors
- Practical assignments that simulate real-world data challenges
- Interactive workshops using professional tools
- Career development activities to build your job readiness

By the end of the course, you'll have a complete capstone project and the skills to confidently pursue an analyst role.

Career Services

You'll have access to unlimited career support from day one through job placement and beyond. Our team works with you 1 on 1 to help you identify your goals, refine your story, and break into the field with confidence.

Each week includes:
- Personalized coaching to build your job search strategy
- Resume and LinkedIn optimization
- Interview practice and technical prep
- Salary negotiation guidance
- Lifetime access to our job board and alumni network

Whether you're switching careers or upskilling in your current role, we help you turn your training into real-world results.

Is It For You?

This program is designed for working professionals, career switchers, and adult learners who are ready to harness the power of data. No prior experience in tech or analytics is required—just a comfort with basic digital tools and a curiosity to explore.

Career Starters & Switchers

Why this course?
- Learn practical data skills in Python, SQL, and Tableau
- Build a job-ready portfolio and get career coaching
- Break into a growing, high-paying field with strong demand

Business & Tech Professionals

Why this course?:
- Enhance your decision-making with data fluency
- Automate tasks and uncover insights in your current role
- Open up new paths in analytics, operations, or management
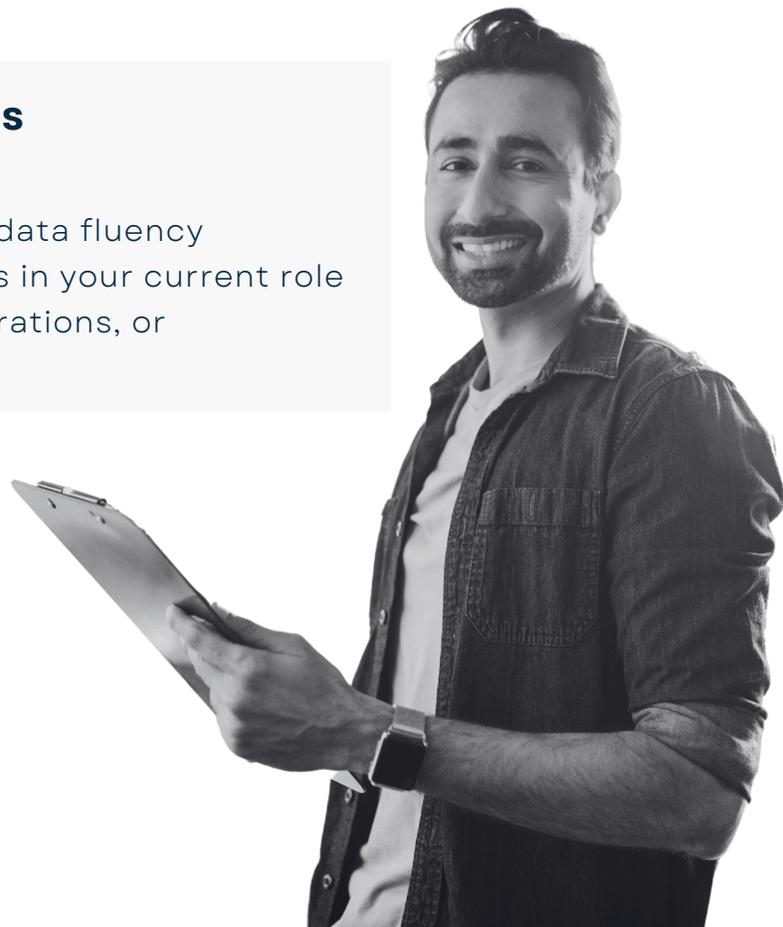
Inside the Experience

BUILD TECHNICAL SKILLS THAT MATTER

Learn to clean, analyze, and visualize data using tools like Excel, Python, SQL, and Tableau–skills employers use daily to make data-driven decisions.

PRACTICE WITH REAL-WORLD TOOLS AND SCENARIOS

Work with real datasets, case studies, and business scenarios to build solutions that mirror the challenges analysts face on the job.

LIVE INSTRUCTION AND CAREER SUPPORT

Join live expert-led sessions each week where you'll explore new content, work through challenges, and prepare for your job search with ongoing guidance.

CAPSTONE PROJECT FOR JOB-READY PROOF

Wrap the course with a capstone project that applies your skills to a real-world data scenario, including a professional-level report and presentation.

UNLIMITED CAREER COACHING

Work one-on-one with a career coach to set goals, improve your resume and LinkedIn, prepare for interviews, and negotiate offers.

AI-POWERED PRODUCTIVITY TOOLS

Learn to use tools like ChatGPT for prompt engineering and workflow automation–giving you a modern edge in data analysis and reporting.

Powered by Support

Learn from professionals who work in the field

Our instructors are more than just teachers. They're experienced data professionals with backgrounds in business intelligence, analytics, and data engineering. They've worked in the industries you're aiming to enter—and they bring that real-world insight and expertise into every session.

What you can expect

- Live instruction led by industry experts
- Practical insights grounded in current analysis techniques and tools
- Personalized feedback on your projects and labs
- Mentorship that helps you grow your confidence and skills

They're here to push you, support you, and make sure you're prepared for the realities of working in data analytics.

Tools and Technologies

Here are some of the tools and technologies you'll learn to use throughout the course. These may vary slightly based on updates in the field or instructor preference, but all are widely used across the data analytics industry.

- Excel – Spreadsheet analysis, formulas, pivot tables, Power Query
- SQL – Querying and managing data in relational databases
- Python – Programming for data analysis, visualization, and automation
- Tableau – Interactive dashboards and data storytelling
- Git & GitHub – Version control and collaborative workflows
- ChatGPT – Prompt engineering for data summarization and productivity

Curriculum

Pre-Work: Technical Fundamentals

Build a foundation in digital literacy and programming logic to prepare for the bootcamp. Learn how to navigate file systems, use command-line tools, and manage version control with Git and GitHub. You'll also explore core computing concepts that underpin all data work.

Course 1
CORE TECHNOLOGIES

Learn the fundamentals of data analysis with Excel and Python. Practice structuring spreadsheets, writing formulas, building visualizations, and automating tasks with Python code. You'll also get an introduction to prompt engineering to enhance your productivity with AI.

Key skills
- Excel formulas and charts
- Python variables and functions
- Prompt engineering basics
- Data wrangling fundamentals

"

The projects felt like real work. We weren't just learning tools–we were solving actual problems with data. It gave me the confidence that I could walk into a data role and start contributing from day one.

- Samantha T.
Business Analyst I

Course 2

DATABASE MANAGEMENT AND ANALYSIS

Explore relational databases and learn to write SQL queries to extract and manipulate data. Then, use Python libraries to clean, transform, and analyze datasets. You'll develop the ability to generate actionable insights from raw data through programmatic workflows.

Key skills
- SQL querying and joins
- Entity relationships
- Data cleaning and prep
- Statistical analysis

Course 3

DATA VISUALIZATION AND COMMUNICATION

Learn how to transform data into clear, compelling visuals. Build dashboards in Tableau, apply principles of visual design, and craft presentations that help stakeholders understand and act on your findings. You'll practice telling stories that drive data-informed decisions.

Key skills
- Dashboard design
- Data storytelling
- Visual best practices
- Stakeholder communication

Course 4

CAPSTONE PROJECT

Complete a final project using real data from a company you choose. You'll design and present a full-scale analysis that demonstrates your technical ability, business insight, and communication skills—creating a portfolio piece that speaks directly to employers.

Key sections

- Data integration and analysis
- Insight generation
- Project management
- Professional presentation

Completion

CERTIFICATE OF COMPLETION

Gain real-world skills and earn a recognized credential.

The course includes online content, live sessions, activities, labs and challenges, and hands-on projects. To earn your award of completion, you must attend live sessions, complete all assignments, and receive a passing grade.

CERTIFICATE

OF COMPLETION

This certificate is proudly awarded to

Mary Greene

For the successful completion of the course conducted by Upright Education in partnership with the University, June 6th – August 26th.

Ryan Tyler
Course Instructor

Awarded on the 31st day of August .
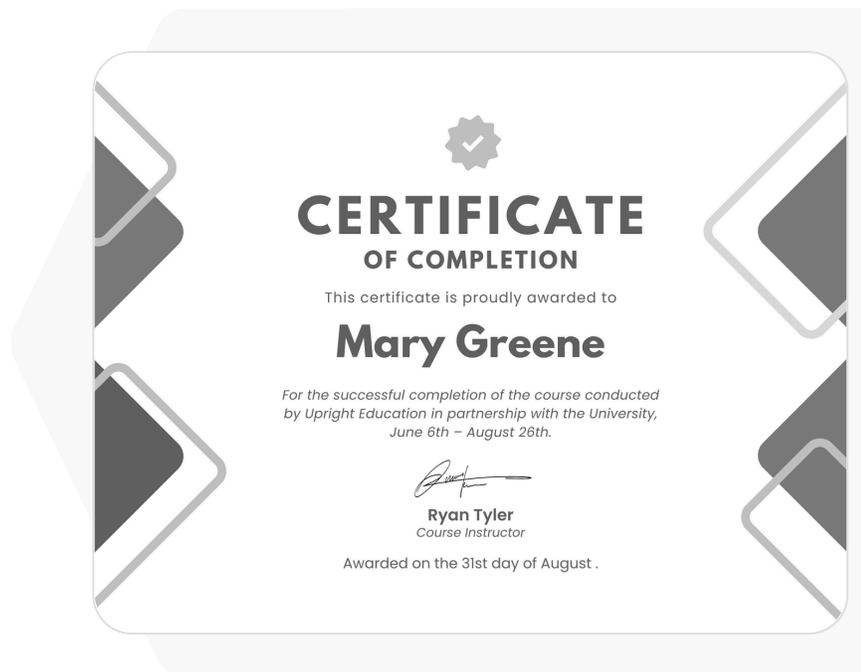
FAQs

DO I NEED A TECHNICAL BACKGROUND TO SUCCEED IN THIS COURSE?

No. This course is beginner-friendly and designed to take you from foundational concepts to job-ready skills, even if you're new to tech. However, the course is technical in nature and learning the technology does become more complex throughout the program, so a base-level digital literacy is required.

IS THIS COURSE LIVE OR SELF-PACED?

It's a mix of both. You'll attend live online sessions twice per week and work on assignments, labs, and projects on your own schedule between sessions.

CAN I TAKE THIS PROGRAM WHILE WORKING?

Yes. This program is built to fit around a full-time job, with evening classes and flexible weekly assignments. That said, it's called a bootcamp for a reason—you should expect a challenging workload that will push you to stay focused and committed each week.

WHAT KIND OF JOB CAN I GET AFTER THIS COURSE?

Graduates of this program are prepared for entry-level and junior roles such as Data Analyst, Business Analyst, Operations Analyst, and Marketing Analyst. You'll gain the technical skills and portfolio projects employers look for—plus career support to help you land a role where you can grow your impact and income in a data-driven organization.
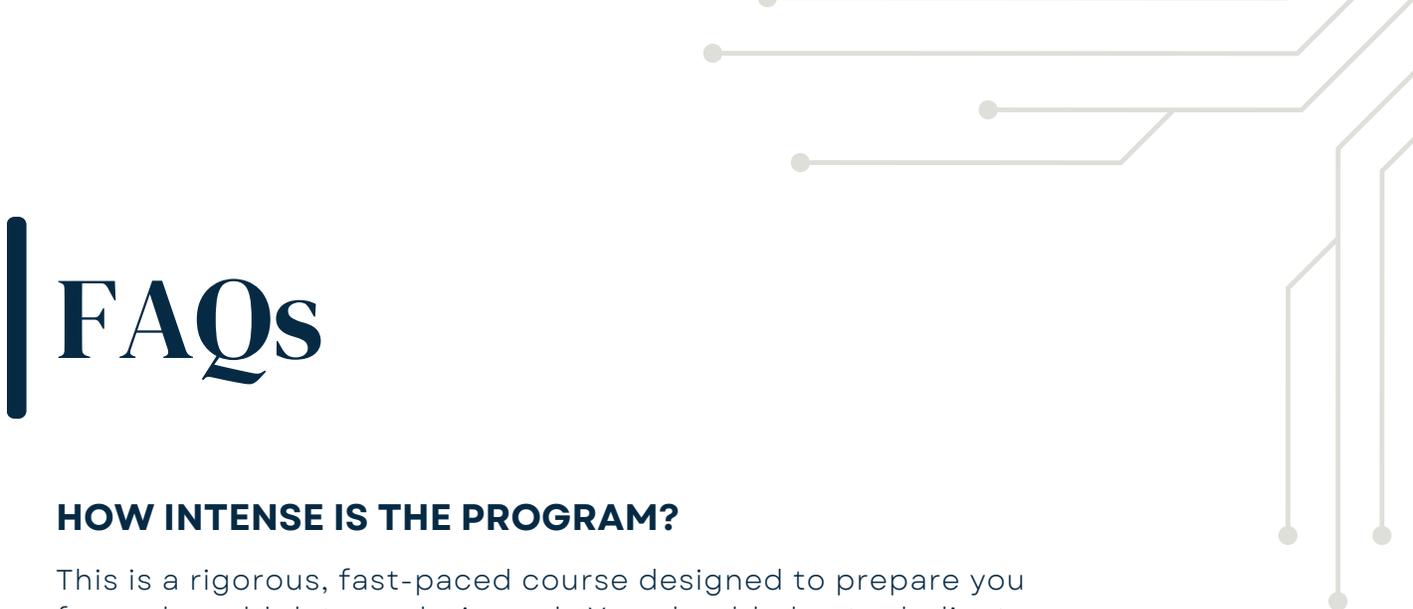
FAQs

HOW INTENSE IS THE PROGRAM?

This is a rigorous, fast-paced course designed to prepare you for real-world data analysis work. You should plan to dedicate 20 to 25 hours per week and come ready to engage, practice, and push yourself. The more you put in, the more you'll get out.

WHAT IF I FALL BEHIND?

You'll have access to instructor support, a learner success team, and live office hours to help you stay on track.

IS JOB PLACEMENT GUARANTEED?

We don't guarantee a job, but we do provide unlimited career support to help you get there. You'll work one on one with a coach, build a professional portfolio, and get guidance every step of the way—from job search strategy to interview prep.

IS THERE A FINAL PROJECT?

Yes. You'll complete a real-world capstone that pulls together everything you've learned and gives you a portfolio-ready piece to show employers.

HOW DO I GET HELP FINDING A JOB?

You'll work 1 on 1 with a career coach to refine your resume, prep for interviews, and map out your job search strategy.

WHAT HAPPENS AFTER THE 16 WEEKS ARE OVER?

You'll keep access to course materials and tools for six more months, plus ongoing support as you continue your job search.
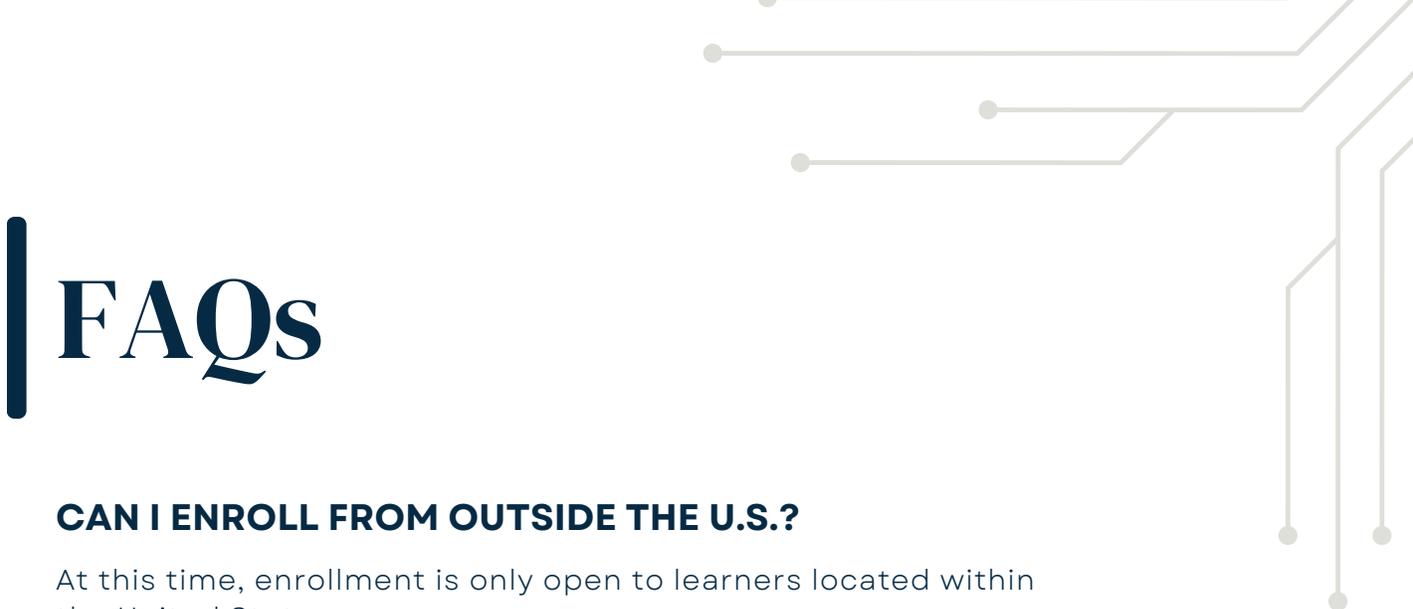
FAQs

CAN I ENROLL FROM OUTSIDE THE U.S.?

At this time, enrollment is only open to learners located within the United States.

HOW MUCH DOES THE COURSE COST?

The full program is priced at $8,400, which includes all tools, support services, and your certificate.

DO YOU OFFER FINANCING OPTIONS?

Yes, we offer flexible payment options, including payment plans, education loans, and pay in full discounts.

CAN MY EMPLOYER PAY FOR THIS COURSE?

Absolutely. We can provide invoices or documentation to support employer reimbursement or tuition assistance programs.

DO YOU OFFER REFUNDS?

Yes, we offer a 14-day refund period from your enrollment date. Full refund policy and details located in the enrollment agreement.

ARE THERE EXPECTATIONS AROUND CONDUCT AND PARTICIPATION?

Yes. We expect all learners to show up on time, engage respectfully in class, and take ownership of their work. This is a professional training environment. Learners who fail to adhere to the rules regarding conduct and participation pursuant to the enrollment agreement may be asked to leave the program.

Want to know more?

Contact Us

If you have any questions about the program or the admissions process, feel free to get in touch using the email address below or give us a call. You can also apply directly via our website.

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✉️ admissions@uprighted.com