



Become a Data Analyst with the UIC Data Analytics Bootcamp

- Receive immersive, live online instruction
- Learn top tools like Tableau, SQL, and ChatGPT
- Graduate with a portfolio of projects
- Get job search support to help you get hired

Curriculum

Business Analytics with Excel	Become a power Excel user by learning how to use advanced features.	<ul style="list-style-type: none">• Conditional formatting and important functions• Analyzing data with pivot tables• Statistics in Excel• Macros and Power Query
SQL: Data Acquisition and Manipulation	Design, learn, and apply the Structured Query Language (SQL) for database definition and manipulation.	<ul style="list-style-type: none">• SQL databases and tables• SQL operators, constraints, and data types• SQL JOINS, set operators, and subqueries• SQL window functions and views
ETL (Extract, Transform, and Load) Data Processes	Integrate data from multiple sources into one data set to prepare it for storage.	<ul style="list-style-type: none">• ETL fundamentals using AWS Glue• Data source identification, extraction, and transformation• ETL tools and technologies
Data Visualization Using Tableau	Create and optimize highly interactive data visualizations using Tableau.	<ul style="list-style-type: none">• Tableau charts, dashboards, and stories• Data preparation, filtering, and analytics in Tableau• Advanced Tableau Desktop features

Please note that this is a sample curriculum and is subject to change.

Curriculum

Fundamentals of Python Programming	Learn to use Python to build and manage data structures.	<ul style="list-style-type: none"> • Conditional statements, loops, and functions • Object-oriented programming (OOPs) and threading
Data Analytics with Python	Apply Python programming toward analyzing, wrangling, and visualizing data.	<ul style="list-style-type: none"> • Linear algebra in Python • Statistics in Python • Data analysis, wrangling, and visualization using Python libraries—including NumPy and Panda
Essentials of Generative AI	Gain in-demand generative AI skills using top tools like ChatGPT, Google Gemini, and more.	<ul style="list-style-type: none"> • GenAI functionality, prompt engineering, and ethics • AI use cases for data analysis and storytelling
Applications of Generative AI in Data Analytics	Explore how to use AI in data analytics to aid data discovery, exploration, and visualization.	<ul style="list-style-type: none"> • ETL and data modeling automation with AI • AI transformation in data visualization
Ethics in Data Analytics	Understand the ethical implications of data practices—from privacy and consent to data bias.	<ul style="list-style-type: none"> • Legal frameworks and data privacy • Informed consent principles • Ethical obligations of data professionals
Capstone Project	<ul style="list-style-type: none"> • Prepare to thrive in the field by completing a Capstone Project to show employers • Use the data tools taught in the program (Excel, SQL, AWS Glue, Tableau, and Python) to demonstrate your skills with a real-world final project 	
Career Success Services	<ul style="list-style-type: none"> • Build a technical resume and craft cover letters • Optimize your LinkedIn profile • Network within the industry 	

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