COURSE SYLLABUS

Business Analyst Tech Certificate (Self-Paced)

Gain essential skills and knowledge to excel as a Business Analyst with this comprehensive certificate program. Master Excel, PowerPoint, SQL, and Tableau while building hands-on expertise in data analysis, data visualization, and presentation design.

> Group classes (Live Online) and onsite training are available for this course. For more information, email onsite@graduateschool.edu or visit: https://www.graduateschool.edu/certificates/business-analyst-tech-certificate-self-paced



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Course Outline

This package includes these courses

- Beginner Excel Course (Self-Paced) (6 Hours)
- Intermediate Excel Course (Self-Paced) (6 Hours)
- Advanced Excel Course (Self-Paced) (6 Hours)
- SQL Bootcamp (Self-Paced) (18 Hours)
- Python for Data Science Bootcamp (Self-Paced) (30 Hours)
- Tableau Bootcamp (Self-Paced) (12 Hours)
- Financial Accounting Bootcamp (Self-Paced)
- PowerPoint Level I (Self-Paced)
- PowerPoint Level II (Self-Paced)
- Google Ads Bootcamp (Self-Paced)

Beginner Excel Course (Self-Paced)

In this beginner Excel workshop, you'll learn the essentials of Microsoft Excel, including calculations, basic functions, graphs, formatting, and printing. This basic Excel class is perfect for those with limited experience looking to expand their proficiency.

- Become familiar with the interface and data entry
- Learn essential formulas and functions
- Format and print your work
- Create charts, including line, column, and pie charts
- Learn tips and tricks for easy workbook management
- Review key concepts in a final project

Intermediate Excel Course (Self-Paced)

- Learn to split and join text, apply data validation, and create named ranges
- Use database functions such as VLOOKUP and HLOOKUP
- Write logical formulas using AND, OR, and IF functions
- Create Pivot Tables to efficiently summarize and analyze large datasets
- Apply statistical functions such as RANK, COUNTIFS, and SUMIFS
- Build advanced combo charts by combining multiple chart types
- Reinforce key concepts through a guided final project

Advanced Excel Course (Self-Paced)

- Cell management, including cell locking, auditing, and hot keys
- Special formatting for calculating dates
- Use advanced functions and advanced analytical tools
- Record macros and relative reference macros for ad hoc reporting

SQL Bootcamp (Self-Paced)

Learn how to extract, filter, and manipulate data using SQL. This course covers PostgreSQL fundamentals, database querying, table joins, and advanced techniques for handling large datasets.

- Write SQL queries to retrieve, filter, and sort data efficiently.
- Use joins to combine information from multiple tables and establish relationships.
- Apply aggregate functions like SUM, COUNT, AVG, and GROUP BY to summarize data.
- Work with subqueries, conditional logic (CASE statements), and advanced string functions.
- Optimize queries using indexes, data type conversions, and best practices.
- Explore views and user-defined functions to streamline database management.

Python for Data Science Bootcamp (Self-Paced)

- Handle different types of data such as integers, floats, and strings
- Control the flow of your programs with conditional statements, loops, and functions
- Reuse and simplify code with object-oriented programming
- Analyze tabular data with NumPy and Pandas
- Create graphs and visualizations with Matplotlib
- Make predictions with linear regression, using scikit-learn

Tableau Bootcamp (Self-Paced)

Develop the skills to turn raw data into compelling visual stories with Tableau, the industry-leading data visualization platform. This hands-on bootcamp teaches you to explore, analyze, and publish dashboards that communicate insights clearly and effectively.

- Connect to datasets in various formats, then clean, filter, and structure the data for effective visual storytelling
- Create a range of visualizations, including bar charts, line charts, treemaps, heat maps, and dual-axis charts
- Use Tableau's calculation tools to create custom fields, apply aggregates, and deepen your data analysis

- Format charts using labels, tooltips, color, and axis adjustments to improve clarity and impact
- Work with geographic data to create interactive map visualizations such as choropleths and proportional symbol maps
- Customize dashboards and stories for various audiences and screen sizes using Tableau's interactivity tools
- Integrate external mapping services and explore advanced visualization types like spider maps and alluvial diagrams
- Publish your work to Tableau Cloud and export dashboards for professional sharing and team collaboration