COURSE SYLLABUS

Data Analytics Certification (Self-Paced)

Build practical data analytics skills at your own pace with hands-on training in Excel, SQL, Tableau, and Power BI. This program focuses on real-world skills while helping you prepare for the official certification exams along the way.

For more information, visit https://www.creativelive.com/learning-path/data-analytics-certification-self-paced



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Course Outline

This package includes these courses

- Excel Level I: Fundamentals Course Online (Self-Paced) (6 Hours)
- Excel Level II: Intermediate Course Online (Self-Paced) (6 Hours)
- Excel Level III: Advanced Course Online (Self-Paced) (6 Hours)
- SQL Course Online (Self-Paced) (18 Hours)
- Tableau Course Online (Self-Paced) (12 Hours)
- Power BI Bootcamp (Self-Paced) (12 Hours)
- Power BI Advanced (Self-Paced) (6 Hours)

Excel Level I: Fundamentals Course Online (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

Excel Level II: Intermediate Course Online (Self-Paced)

Learn intermediate Excel functions like VLOOKUP and SUMIFS, and how to summarize data with Pivot Tables, Sort & Filter databases, and split and join text. Gain the skills needed to utilize complex Excel functions and prepare for more advanced training.

- 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 PivotTables 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

Excel Level III: Advanced Course Online (Self-Paced)

Learn advanced Excel functions, macros, and data analysis to improve efficiency and manage complex data in any job setting. This advanced course is ideal for Excel power-users.

- 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 Course Online (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

Tableau Course Online (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 data for effective visual storytelling
- Create a range of visualizations including bar charts, line charts, treemaps, heat maps, dual-axis charts, and advanced types like spider maps and alluvial diagrams
- Use Tableau's calculation tools to create custom fields, apply aggregates, and deepen your data analysis
- Format charts with labels, tooltips, color, and axis adjustments, and build 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
- Publish work to Tableau Online and export dashboards for professional sharing and collaboration

Power BI Bootcamp (Self-Paced)

Learn how to transform raw data into powerful, interactive dashboards with Power BI, a leading business intelligence tool used

across industries. This hands-on bootcamp covers data connections, visual design, and publishing reports for real-world insights.

- Import and clean data from multiple sources, including Excel, CSV, and online databases using Power Query
- Create interactive visualizations such as charts, maps, cards, and slicers to explore trends and patterns
- Use DAX (Data Analysis Expressions) to build measures, calculated columns, and custom aggregations
- Design visually engaging reports by adding titles, logos, and formatting options for a professional finish
- Understand and manage relationships between tables to create dynamic, filterable reports
- Share and collaborate on reports via the Power BI Service, including exporting, commenting, and app integration
- Set up dashboards and explore differences between dashboards and reports for business presentation
- Schedule data refreshes and manage reusable datasets to keep reports up-to-date and scalable

Power BI Advanced (Self-Paced)

This advanced Power BI course focuses on building more reliable data models using proper relationships, filter flow, fiscal and calendar date tables, Row-Level Security, and more.

- Build better data models by understanding relationships, cardinality, and cross-filter direction
- Design reliable data models and avoid common modeling mistakes
- Create and use hierarchies to organize and drill into data
- Control visual order with custom sort columns
- Create reusable date tables supporting fiscal and calendar years
- Add parameters to make reports interactive and flexible
- Implement Row-Level Security (RLS) with Static and Dynamic roles