

# Data Analytics & Visualization

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Unlock the skills that businesses rely on every day to make smarter decisions. Our Data Analytics & Visualization program is designed for learners who want practical, job-ready training that leads directly to career opportunities in the growing field of data analytics. Whether you're new to data or looking to level up your skills, this program gives you the tools, confidence, and hands-on experience employers look for.

Every course is designed with employer needs in mind. Students learn the tools and techniques used in real-world analytics roles today. You'll work with real datasets and complete portfolio-ready projects that demonstrate your skills to potential employers. The program prepares students for entry-level roles such as Data Analyst, Business Intelligence Analyst, Reporting Specialist, and more.

Instructors with industry experience help you build confidence as you learn new tools and apply them to real problems.

## Data Analytics & Visualization Certificate Program

The CCM Certificate in Data Analytics and Visualization provides participants with data acumen in the areas of data manipulation, visualization and interpretation. To obtain our certificate, you must take the following courses. Classes may be taken in any order. Students will need to save their work to their local computer or a flash drive.

Course Code	Course Title	CEUs
CPC-629E	Business Analytics with Excel	0.6
CPC-664E	Power Business Intelligence (BI)	0.8
CPC-665E	SQL for Data Management	0.8
CPC-631E	Introduction to R Programming	0.6
CPC-662E	Tableau Desktop Specialist	1.2

For information on current course offerings and how to register, please go to our website (<https://www.ccm.edu/workforce-development/>).

## Courses

### Business Analytics with Excel

**PREREQUISITE:** Proficient/intermediate knowledge of MS Excel. Learn how data science is applied in business. Explore concepts in correlation, regression analysis, hypothesis testing and multivariate analysis. Learn how correlation helps to understand portfolio diversification and design. What If analysis will be covered utilizing the Solver and Goal Seek features of Excel. CPC-629E.

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### Power Business Intelligence (BI)

**PREREQUISITE:** Proficient knowledge of MS Excel. This hands-on course introduces students to Microsoft Power BI, one of the most

widely used business intelligence tools for transforming raw data into compelling, interactive visualizations and dashboards. Designed for aspiring data analysts and professionals in business or technical fields, the course emphasizes practical skills in data connection, transformation, modeling, and visualization. CPC-664E.

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### SQL for Data Management

**PREREQUISITE:** Intermediate Computer Knowledge. This course provides a practical introduction to Structured Query Language (SQL) - a foundational tool for accessing, managing, and analyzing data stored in relational databases. Designed for students pursuing careers in data analytics, business intelligence, or data-driven decision-making, the course focuses on writing queries to extract insights from real-world data. CPC-665E.

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### Introduction to R Programming

**PREREQUISITE:** Proficient knowledge of MS Excel. R's widespread popularity to analyze large data sets makes it an essential tool in almost every field. The course will cover exploratory data analysis techniques, visualization methods, modeling and ideas in reproducible research using packages from base R. Students will learn the basic syntax for R and how functions and packages work. CPC-631E.

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### Tableau Desktop Specialist

This hands-on course will teach participants the fundamental Tableau skills needed in the workplace and prepare them to take the Tableau Desktop Specialist (TDS-C01) certification exam. The curriculum covers key exam topics, including connecting to and preparing data with live connections, extracts, joins, and relationships; analyzing data using a variety of charts and graphs; and designing interactive dashboards and stories to effectively communicate insights. CPC-662E.

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