COURSE 7- DATA ANALYSIS WITH R PROGRAMMING

R is a programming language that can help you in your data analysis process. In this part of the course, you’ll learn about R and RStudio, the environment you’ll use to work in R. You’ll explore the benefits of using R and RStudio as well as the components of RStudio that will help you get started.

### Learning Objectives

* Compare and contrast the R programming environment and the RStudio programming environment
* Describe the RStudio programming environment including its components and benefits
* Describe the R programming language and its programming environment
* Describe programming languages and appropriate use including examples
* Download and install R assets to a computer
* Open R and execute a command
* Differentiate between the R Console and R programming environments
* Execute operations in R using mathematical operators such as +, -, \*, and /
* Download and use RStudio Desktop
* Demonstrate how to complete basic tasks in R

THE EXCITING WORLD OF PROGRAMMING

[Introduction to the exciting world of programming](https://www.coursera.org/learn/data-analysis-r/lecture/NC1Mv/introduction-to-the-exciting-world-of-programming)

[Course syllabus](https://www.coursera.org/learn/data-analysis-r/supplement/Y0Vr4/course-syllabus)

[Refresher: Your data analytics certificate roadmap](https://www.coursera.org/learn/data-analysis-r/ungradedWidget/RzYJT/refresher-your-data-analytics-certificate-roadmap)

[The R-versus-Python debate](https://www.coursera.org/learn/data-analysis-r/supplement/pGHK8/the-r-versus-python-debate)

[Learning Log: Get ready to explore R](https://www.coursera.org/learn/data-analysis-r/supplement/nFwJ3/learning-log-get-ready-to-explore-r)

[Fun with R](https://www.coursera.org/learn/data-analysis-r/lecture/xsTG8/fun-with-r)

[Video](https://www.coursera.org/learn/data-analysis-r/lecture/xsTG8/fun-with-r)

[Carrie: Getting started with R](https://www.coursera.org/learn/data-analysis-r/lecture/sqm2J/carrie-getting-started-with-r)

[Meet and greet](https://www.coursera.org/learn/data-analysis-r/discussionPrompt/HHB6q/meet-and-greet)

PROGRAMMING AS A DATA ANALYST

[Programming languages](https://www.coursera.org/learn/data-analysis-r/lecture/hoWfr/programming-languages)

[Ways to learn about programming](https://www.coursera.org/learn/data-analysis-r/supplement/y8zTf/ways-to-learn-about-programming)

[From spreadsheets to SQL to R](https://www.coursera.org/learn/data-analysis-r/supplement/jNOkl/from-spreadsheets-to-sql-to-r)

[Introduction to R](https://www.coursera.org/learn/data-analysis-r/lecture/hYFgv/introduction-to-r)

[Optional Hands-On Activity: Downloading and installing R](https://www.coursera.org/learn/data-analysis-r/quiz/mWN3I/optional-hands-on-activity-downloading-and-installing-r)

[Optional Hands-On Activity: R Console](https://www.coursera.org/learn/data-analysis-r/quiz/rP1nm/optional-hands-on-activity-r-console)

[Test your knowledge on programming languages](https://www.coursera.org/learn/data-analysis-r/quiz/sj4Fp/test-your-knowledge-on-programming-languages)

LEARN PROGRAMMING USING RStudio

[Intro to RStudio](https://www.coursera.org/learn/data-analysis-r/lecture/HuGrI/intro-to-rstudio)

[Hands-On Activity: Cloud access to RStudio](https://www.coursera.org/learn/data-analysis-r/quiz/kAQV5/hands-on-activity-cloud-access-to-rstudio)

[Optional Hands-On Activity: Get started in RStudio Desktop](https://www.coursera.org/learn/data-analysis-r/quiz/1eqMt/optional-hands-on-activity-get-started-in-rstudio-desktop)

[When to use RStudio](https://www.coursera.org/learn/data-analysis-r/supplement/Q1J3x/when-to-use-rstudio)

[R&R...Studio!](https://www.coursera.org/learn/data-analysis-r/discussionPrompt/RmWTf/r-r-studio)

[Connecting with other analysts in the R community](https://www.coursera.org/learn/data-analysis-r/supplement/XgjMC/connecting-with-other-analysts-in-the-r-community)

[Test your knowledge on programming with RStudio](https://www.coursera.org/learn/data-analysis-r/quiz/3uM4T/test-your-knowledge-on-programming-with-rstudio)

M1 CHALLENGE

[Glossary: Terms and definitions](https://www.coursera.org/learn/data-analysis-r/supplement/EUfkW/glossary-terms-and-definitions)

[Module 1 challenge](https://www.coursera.org/learn/data-analysis-r/exam/LuT1B/module-1-challenge)