

Introduction to R for Data Science

Modality: On Demand

Duration: 12 Hours

ABOUT THIS COURSE

R is rapidly becoming the leading language in data science and statistics. Today, R is the tool of choice for data science professionals in every industry and field. Whether you are full-time number cruncher, or just the occasional data analyst, R will suit your needs.

This introduction to R programming course will help you master the basics of R. In seven sections, you will cover its basic syntax, making you ready to undertake your own first data analysis using R. Starting from variables and basic operations, you will eventually learn how to handle data structures such as vectors, matrices, data frames and lists. In the final section, you will dive deeper into the graphical capabilities of R, and create your own stunning data visualizations. No prior knowledge in programming or data science is required.

What makes this course unique is that you will continuously practice your newly acquired skills through interactive in-browser coding challenges using the DataCamp platform. Instead of passively watching videos, you will solve real data problems while receiving instant and personalized feedback that guides you to the correct solution.

Enjoy!

Course Objective:

- Introductory R language fundamentals and basic syntax
- What R is and how it's used to perform data analysis
- Become familiar with the major R data structures
- Create your own visualizations using R

Prerequisite:

- None, but previous experience in basic mathematics is helpful.

Course Outline:

1. Basics

- Lecture: R: The true basics
- Lab: R: The true basics
- Lecture: Basic data types
- Lab: Basic Data Types
- Further Readings

2. Vectors

- Lecture: Create and name vectors
- Lab: Create and name vectors
- Lecture: Vector Arithmetic
- Lab: Vector Arithmetic
- Lecture: Vector Subsetting
- Lab: Vector Subsetting
- Further Readings

3. Matrices

- Lecture: Create and name matrices
- Lab: Create and name matrices
- Lecture: Matrix subsetting
- Lab: Matrix subsetting
- Lecture: Matrix Arithmetic
- Lab: Matrix Arithmetic
- Further Readings

4. Factors

- Lecture: Factors
- Lab: Factors
- Further Readings

5. Lists

- Lecture: Create and name lists
- Lab: Create and name lists
- Lecture: Subset and extend lists
- Lab: Subset and extend lists
- Further Readings

6. Data frames

- Lecture: Explore the data frame
- Lab: Explore the data frame
- Lecture: Subset, extend and sort your data frame
- Lab: Subset, extend and sort your data frame
- Further Readings

7. Graphics

- Lecture: Basic graphics
- Lab: Basic graphics
- Lecture: Customizing your plots
- Lab: Customizing your plots

- Lecture: Multiple plots
- Lab: Multiple plots
- Further Readings

Final Lab

- Final Lab

Final Exam

- Final Exam?