

Learning R for complete beginners using free online resources

RStudio has many resources to get you started in your quest to self-learn R. Check the resources listed in the [Education web pages of RStudio](#).

In the [For Beginners pages](#) it is suggested how you can learn what R and RStudio are, how to install them in your computer as well as some resources on how to get going with R.

An excellent resource on R are the notes by Venables and Smith [An Introduction to R](#). These notes teach about “Base R” which is quite essential to understand how other packages in R work and use them.

A family of packages recently developed, the tidyverse, shows how to do things in R using different syntax than Base R and using a concept of data structure called “tidy data”. The video, suggested in the [beginner education pages of RStudio](#) “A Gentle Introduction to Tidy Statistics In R” is a good way to start.

Please, download the materials for Data Science with R which contain a tutorial developed at the Data Science Campus to learn the basic principles underpinning the tidyverse and how to carry out data wrangling using the tidyverse and basic visualisations in R using ggplot2.

Here is a suggested step-by-step way to self-learn R.

1. Take the beginner tutorials recommended in RStudio: [Getting started with R and R Studio](#), and also [Basic Basics \(3 tutorials\)](#)
2. Now you should have R and RStudio installed in your computer and you should have understood what R and RStudio are and what they are for. It's time to get started with some coding in R. Since you are doing this on your own, you should first understand the basics, as explained in [An Introduction to R](#). I recommend that you start by going through chapters 1, 2, 3, 4, 6, 7. The rest of the chapters have good material but you could leave this for later in your learning path.
3. Now you could watch the video [A gentle introduction to tidy statistics in R](#) and try to follow in your computer.
4. Take the “Data Science with R” tutorial which I have sent you a link to download it from, together with the data sets. In order to get this tutorial working, you must use RStudio and know where the folder with the relevant files is. Open RStudio and in the top menu click on “Session”, then on “Set Working Directory”, then on “Choose Directory”. Choose the directory where the tutorial files are located. Now you are ready to get started. Open the html file in a web browser of your choice. The text in greyed out areas corresponds to R code (R chunks). You should replicate these chunks in the RStudio editor (Click “File”, “New File”, “R Markdown”, accept all the options, save the document with a meaningful name) and execute each of them immediately after you have written them. Compare your output with the output in the html file immediately after the chunk. They should be similar.

After this training is complete, you should be able to embark on your own projects. There is plenty of help on the web to aid with things you have not learned in the tutorials, and now that you have learned the fundamentals from curated and reputable sources, you should be able to discern the good from the not-so-good available in the internet.

You can continue to self-learn by following the suggestions for [intermediate and advanced tutorials in RStudio](#) and going through the remaining chapters of [An Introduction to R](#). Also, there are suggestions for further reading in the Data Science with R notes.

Happy leaRning!