

# Installing the Necessary Software

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In the following lines you will find links to install the necessary programs to this course.

This document is intended for Windows users.

## R

The main tool for this course is the “R” software which should be installed first.

You can find the installer to the most recent version here:

<https://cran.r-project.org/bin/windows/base/>

Windows install the latest version of the R as new software. Therefore, make sure to uninstall the previously installed version of R from your computer.

## RStudio

“RStudio” is a editor and friendly interface to use the R. You can find the installer in the following link:

<https://posit.co/download/rstudio-desktop/#download>

## Juice

“Juice” is software for the analysis of phytosociological data. Although not directly linked, the Juice software supports connection with R being possible to use the Juice features from the R interface.

You can download the Juice’s installer (and found more information about Juice) in this link:

<https://www.sci.muni.cz/botany/juice/?idm=3>

## Pandoc

The simple R code, as an extension .R, allows you to perfectly create, share, and reproduce R codes. However, the .R codes are restricted to the R language.

An option to create codes in R is the “RMarkdown” format. Besides providing many additional settings to organize and improve your codes, the “RMarkdown” allows you to use multiple languages in the same code, including R, Python, and SQL.

“Pandoc” is a document conversion software that can convert many markup languages. Similarly to Juice, Pandoc is independent of R but is necessary to develop Markdown codes.

You can download the Pandoc installer from this link:

<https://pandoc.org/installing.html>

...or install directly from R using the follow command line in R console:

```
install.packages("pandoc")
```

# MiKTeX

“MiKTeX”, LaTeX distribution, is software for document preparation that allows exporting your Markdown code in PDF format.

<https://miktex.org/download>