

# Pre-Course Programming

March 14 – 16, 2022

Master Degree Data Science, Summer Semester 2022

You have just basic or no experience in Python and R programming? You haven't practiced programming for a while? You want to avoid software installation problems during the regular courses?

Then this pre-course "Programming" may be useful for you. In this course, we will make sure that everyone gets Python, R, and other needed open source software properly installed and configured. We will discuss basic programming concepts, and get used to coding.

If you would like to participate, please send a short email to [thomas.bossmann@fh-kiel.de](mailto:thomas.bossmann@fh-kiel.de). Please bring your private laptop. You will install open source software and carry out all exercises on your laptop.

## Dates and Locations:

- March 14, 13.00 – 16.00, Location: C03-1.11
- March 15, 09.00 – 15.00, Location: C03-1.11
- March 16, 09.00 – 15.00, Location: C03-0.04

## Contents:

- Installation
- Getting started: writing and evaluating code, getting help, scripts, jupyter notebooks, Markdown, integrated development environments, packages, virtual environments
- Basic programming concepts: data types, subsetting, reading data, functions, control structures

For those who do not, or cannot, attend the pre-course: We will cover many of the topics in the first-semester module "Tools and Programming Languages for Data Science" as well. But we won't go through the installation and will spend less time on the basics. So, you may have to make extra efforts during the semester to catch up.

Best regards

Tillmann Schwörer