



INSTITUTE FOR STRATEGY,  
TECHNOLOGY AND ORGANIZATION

## Prep-Course on Data Science with DataCamp

### Summer Semester 2025

#### Basic Information

Type of Course: Seminar for doctoral candidates (B/II)

Term: SoSe 2025

Language: English

There is no participant limit.

#### Lecturer/Course Coordinator

Dr. Chengdi Fa and Dr. Ambre Nicolle (ISTO)

#### Registration

To register, please send an email to Dr. Ambre Nicolle [a.nicolle@lmu.de](mailto:a.nicolle@lmu.de)

Registration Deadline: **15th of April 2025 (11:59 pm)**

#### Dates & Location

Mandatory kick-off: Wednesday, 23.04.2025, 4:00-5:00 pm, via Zoom.

Zoom Link: will be provided via email

**Credits:** 4 SWS towards B/II module

#### Examination

Successful completion of the mandatory online courses. Please send the certificates issued by DataCamp to the lecturer's e-mail.

For further information, please contact Ambre Nicolle ([a.nicolle@lmu.de](mailto:a.nicolle@lmu.de)).

#### Overview

We are witnessing a fundamental shift into big data and programming in our research routine. Many of the MBR courses assume a specific knowledge of Python. With this course, students have the opportunity to learn in advance how to code in Python, so that they can exploit the MBR courses' contents fully.

#### Course Structure

The course consists of a kick-off and online sessions dedicated to learning to code with Python. After completing the mandatory online course, students have the opportunity to build their curriculum.

- Students enrolled in the course have access for six months to 300 hours of data science videos and coding exercises on DataCamp.
- Students should choose specialized courses to leverage their skills in data manipulation, visualization, and analysis.
- DataCamp offers a broad range of courses that cover programming, statistics, machine learning, finance models, etc. The online classes are not limited to Python, but span to R, SQL, GIT, and Shell.

**Compulsory courses:**

- Intro to Python for data science (\*)
- Intermediate Python for data science
- Python data science toolbox
- Note: The \*course listed above is mandatory preparation material for the following courses: Textual Analysis (B/II).

**Recommended courses (this list is not exhaustive):**

- Introduction to Data Visualization with Seaborn
- Intermediate Data Visualization with Seaborn
- Web Scraping in Python
- Introduction to Natural Language Processing in Python
- Intro to R
- Intermediate R
- Cleaning Data in R
- Introduction to Data Visualization with ggplot2
- Introduction to Natural Language Processing in R