

Vrije Universiteit Amsterdam - 2024-2025

# Project Big Data

Course Code	X_400645
Credits	6
Period	P6
Course Level	300
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. A. Zocca
Examiner	dr. A. Zocca
Teaching Staff	dr. A. Zocca
Teaching method(s)	Study Group, Lecture

## Course Objective

After completing this course, a student can:

- import, clean, transform, filter, and explore data in Python
- store and retrieve semi-structured data in and from various kinds of database
- create appropriate and well-formatted visualizations and tables
- fit statistical models and train basic machine learning models
- address a research question using a large dataset and report on their findings

#### **Course Content**

This course aims to integrate various aspects of modern data science and teach the fundamentals of working with big data. Topics include working with structured data; statistical data analysis; visualization of data; preparing data for processing; storing unstructured data; fitting statistical models; training basic machine learning models. Python is used throughout this hands-on project-based course.

# Additional Information Teaching Methods

Lectures and tutorial sessions

### Method of Assessment

Hand-in individual assignments plus a group project, which entails an oral presentation and a final written report. The weights will be specified on Canvas; the weighted average needs to be 5.5 or higher. There is no resit for this course.

#### **Entry Requirements**

Additional Information Target Audience

2BA

Recommended background knowledge

Programming experience in any language is necessary