



COURSE 2

DATA SCIENCE

Study load: 6 credits

Total study load: 150 hours

EU-Partner(s): AP, HOWEST, UVI

TC-Partner(s): MUNI

PREREQUISITES

None

STUDY MATERIALS

- Moodle course – digital course
- Presentations
- Weblinks
- Self-study materials
- Video recordings
- Demos

TECHNICAL REQUIREMENTS / LAB EQUIPMENT

- Microsoft Office
- Spyder
- Jupyter Notebook
- Anaconda

LEARNING OUTCOMES

- The student will know basic statistics
- The student understands applications of basic statistic
- The student can calculate probabilities and make predictions based on supplied data
- The student can analyze and preprocess data for use in a machine learning pipeline

ACTIVITIES

- Activating lectures
- Supervised self-paced learning
- Labs

CONTENT

- Types of data, data representation and measures of central tendency
- Data processing and visualization in Python
- Spreading values
- Probability theory, sample distributions and inferential statistics
- Correlation and regression
- Linear regression and time series predictions
- Inconsistent data and data preprocessing

EVALUATION

First exam chance

FORM	%	REMARK
Exam	65.00	
Continuous assessment	35.00	Various interim assignments

Second exam chance (re-sit exam)

FORM	%	REMARK
Exam	100.00	