

Course Title:	Pandas Data Processing
Institute/Division:	Department of Automation and Computer Engineering Faculty of Electrical and Computer Engineering
Course code:	E-PDP
Erasmus subject code:	0613 Software and applications development and analysis
Number of contact hours:	45
Course duration:	1 semester (Spring/Summer)
ECTS credits:	6
Course description:	The course consists of laboratory exercises. The Python fast canning and introduction to Pandas. Pandas Series and DataFrames operations. Working with csv and excel files. Data cleaning and filtering methods, selecting subsets and functions on data. Grouping and aggregating data. Reshaping and pivoting data. Joining and merging data. Working with text data. Multi-index DataFrames. Time series analysis. Visualization, for example: boxplot, pie charts, line graphs. Intended software: Anaconda Jupiter Python Notebook.
Course type:	Lectures (9h), Laboratory (36h)
Literature:	Paskhaver B.: Pandas in Action Heydt M.: Learning pandas - Python Data Discovery and Analysis Made Easy Harrison M.: Effective Visualization: Exploiting Matplotlib & Pandas
Assessment method:	Laboratory exercises and two knowledge tests
Prerequisites:	-
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