



Course title	Problem solving in data sciences (Master)
Institute/Division	Faculty of Computer Science and Telecommunication/ Department of Computer Science
Course code	F-1.PS_2
Erasmus subject code	11.3
Number of contact hours**	45 lecture hours (45h)
Course duration	No specified semester
ECTS credits	6
Course description (max 100 words)	The students must define the problem related to data analysis, the concrete topic, and the scenario individually. The teacher just supervised the work. The students must find the open data repository, get the data for the analysis, and provide data pre-processing. They also should select and implement the proper data classification or clustering methods. They will work on individual projects.
Literature	All available materials on data pre-processing, data clustering and classification.
Course type/organization	<ul style="list-style-type: none">• Lectures (15h)• Projects (30h)
Assessment method	Realizing all project steps and presenting the results with the prepared report.
Prerequisites	<ul style="list-style-type: none">• Backgrounds in data mining, global optimization, artificial intelligence• Advanced practical knowledge of Python, Java
Primary target group	Computer science students: master's degree students with good programming skills.
Contact person	Joanna Kołodziej (PhD, DsC, Prof.PK)
Remarks	N/A

*please insert one of the following codes:

- 11.0 Mathematics, Informatics
- 11.1 Mathematics
- 11.2 Statistics
- 11.3 Informatics, Computer Science
- 11.4 Artificial Intelligence
- 11.5 Actuarial Science
- 11.9 Others Mathematics, Informatics

**1 lecture hour=45 minutes