



Course title	Data Mining with R
Institute/Division	Faculty of Computer Science and Mathematics/ Department of Computer Science
Course code	F-1.DMR
Erasmus subject code*	Informatics, Computer Science
Number of contact hours**	45 lecture hours (45h)
Course duration	1 semester (Fall)
ECTS credits	6
Course description (max 100 words)	The students will learn the most current techniques to process large datasets using the very popular and very simple R language within RStudio environment, which will be used to extract valuable knowledge from data, to classify and to cluster it within datasets and to perform analytical predictions, based on the available datasets.
Literature	Guides: https://spark.rstudio.com/guides/ ; https://rpubs.com/cliex159/885971 ; Online books: https://bookdown.org/ ; https://www.tidytextmining.com/ ; https://www.tmwr.org/ ; https://therinspark.com/ ; http://r4ds.had.co.nz/ ; https://smltar.com/ ; http://www.rdatamining.com/docs/introduction-to-data-mining-with-r ; Examples: https://ggplot2-book.org/ ; https://rpubs.com ; https://stat545.com/index.html ; https://www.kaggle.com/ ; https://www.kaggle.com/code?language=R ; https://emilhvitefeldt.github.io/ISLR-tidymodels-labs/index.html ; Cloud free platform: https://rstudio.cloud/ ; Online free server: https://rdr.io/snippets/
Course type/organization	Lectures and exercises
Assessment method	There will be few homeworks. Each one should be returned to the teacher up to 2 weeks after distribution.
Prerequisites	None
Primary target group	computer science students of the 3rd or 4th year
Contact person	Barbara Borowik, PhD; bborowik@pk.edu.pl
Remarks	

*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