Course title	Machine Learning in Medical Image Diagnosis (Master)
Institute/Division	Faculty of Computer Science and Mathematics/ Department of Computer Science
Course code	F-1.ML_MED
Erasmus subject code*	11.4
Number of contact hours**	45 lecture hours (45h)
Course duration	1 semester (Fall or Spring)
ECTS credits	6
Course description (max 100 words)	The module introduces machine learning (ML) methods and tools for data preprocessing, processing and analytics. ML techniques include kNN, regression methods, decision trees, SVM and convolution networks. Such techniques apply to many problems in data mining. This course focuses on medical data processing and supporting medical image diagnosis.
Literature	Basic literature on the subjects of machine learning, data analysis, preprocessing and analytics, medical data
Course type/organization	• Lectures (15h) • Projects (30h)
Assessment method	Attending lectures and completing the practical projects with the reports.
Prerequisites	• Backgrounds in data mining, global optimization, artificial intelligence • Advanced practical knowledge of Python, Java
Primary target group	Bachelor degree in computer sciences telecommunication or a similar discipline
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