



Course title	MATLAB Programming
Institute/Division	Faculty of Computer Science and Mathematics/ Department of Computer Science
Course code	F-1.MP
Erasmus subject code*	11.3 Informatics, Computer Science
Number of contact hours**	45 lecture hours (45h)
Course duration	1 semester (Spring)
ECTS credits	6
Course description (max 100 words)	MATLAB is a high-level technical computing language and interactive environment for algorithm development, data visualization, data analysis and numeric computation. The course incorporates the following subjects: introduction to programming in MATLAB (basic syntax and command-line exercises, operators, special values, conditional statements, loop control statements), functions and scripts, matrices and arrays, object-oriented programming, mathematical functions, solving linear equations, performing symbolic math computations, functions for two- and three-dimensional data visualization, graphics & data processing, statistics, parallel computing using Parallel Computing Toolbox, building graphical user interfaces (project).
Literature	<ol style="list-style-type: none">1. MATLAB documentation and resources: www.mathworks.com2. Stormy Attaway, Matlab: A Practical Introduction to Programming and Problem Solving, Elsevier, 20093. William J. Palm III, Introduction to MATLAB for Engineers, McGraw-Hill, 2011
Course type/organization	Lectures, laboratories, projects
Assessment method	Attendance, laboratory exercises and project
Prerequisites	Any programming language
Primary target group	Computer Science students
Contact person	Krzysztof SKABEK, PhD, kskabek@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