

Course title:	MATLAB Programming
Institute/Division:	F-3, Institute of Computer Science
Course code:	F32-MProg
Erasmus subject code:	Informatics, Computer Science
Number of contact hours:	45 hours
Course duration:	1 semester
ECTS credits:	6
Course description:	MATLAB is a high-level technical computing language and interactive environment for algorithm development, data visualization, data analysis and numeric computation. Course consists: basic syntax and command-line exercises, introduction to programming in MATLAB (read and make code of MATLAB, operators, special values, conditional statements, loop control statements), functions and scripts, matrices and arrays, object-oriented programming, parallel computing by using <i>Parallel Computing Toolbox</i> , mathematical function library, functions for two- and three-dimensional data visualization, handle graphics, build graphical user interfaces, creating and simulating a Simulink model.
Literature:	<ol style="list-style-type: none"> 1. MATLAB homepage resources: www.mathworks.com 2. B. Mrozek, Z. Mrozek, MATLAB i Simulink, Poradnik użytkownika (MATLAB and Simulink, 3e: User's Guide – in Polish, for reference only) 3. File examples http://www.mathworks.com/matlabcentral/fileexchange/5061#
Course type:	Lectures (20h), laboratories (20h), projects (5h),
Assessment method:	Attendance, laboratory exercises and projects.
Prerequisites:	Any language of programming.
Primary target group:	3-th year students.
Lecturer:	Bogumiła MROZEK, PhD,
Contact person:	Bogumiła MROZEK, PhD, bmrozek@pk.edu.pl
Deadline for application:	15th of January
Remarks:	MATLAB, Simulink and their extensions (toolboxes) are available in computer laboratory. MATLAB extensions will be used during lectures.