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| Course title: | MATLAB PROGRAMMING |
| Department: | F-3, Department of Computer Science |
| Course code: | F3-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, 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:

1. MATLAB homepage resources: www.mathworks.com
2. Stormy Attaway, Matlab: A Practical Introduction to Programming and Problem Solving, Elsevier, 2009
3. William J. Palm III, Introduction to MATLAB for Engineers, McGraw-Hill, 2011

Course type: Lectures, laboratories, projects,

Assessment method: Attendance, laboratory exercises and projects.

Prerequisites: Any language of programming.

Primary target group: 3-rd year students.

Lecturer: Krzysztof SKABEK, PhD,

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