Course title:	**Theoretical Foundations of Computer Science**
Institute/Division:	Institute of Mathematics, Faculty of Physics, Mathematics and Computer Science
Course code:	
Erasmus subject code:	11.0 Mathematics
Number of contact hours:	45 hours
Course duration:	1 semester
ECTS credits:	6
Course description:	Languages, Automata and Turing Machines. Applications of Logic in Computer Science. Computability Theory.
Literature:	Hopcroft, John E.; Motwani, Rajeev; Ullman, Jeffrey D. , Introduction to Automata Theory, Languages, and Computation, Pearson,2006. M. Sipser., Introduction to the Theory of Computation Third Edition, Cengage, 2005 Ch.Papadimitriou, Computational Complexity, Addison-Wesley, 1994 S. Burris, Logic for Mathematics and Computer Science, Prentice Hall, 1998. B. Khoussainov, A. Nerode, Automata theory and its applications, Progress in Computer Science and Applied Logic, Birkh¨auser Boston, 2001. Cormen, T.; Leiserson, Ch. E., Rivest, R. L., Stein, C. Introduction to Algorithms (3rd ed.). MIT Press and McGraw-Hill 2009
Course type:	lectures, problem sessions
Assessment method:	two tests during the semester, final exam
Prerequisites:	Abstract Algebra
Primary target group:	Computer Science and Mathematics major, MSc program
Lecturer:	Katarzyna Pałasińska, PhD
Contact person:	Katarzyna Pałasińska, e-mail: kpalasinska@gmail.com
Deadline for application:	15th of January