

Course title: **Logic for Mathematics and Computer Science**
Institute/Division: Institute of Mathematics, Faculty of Physics, Mathematics and Computer Science

Course code:
Erasmus subject code: 11.1 Mathematics
Number of contact hours: 45 hours
Course duration: 1 semester
ECTS credits: 6
Course description: This is an elective course for MSc students. Topics covered: Propositional logic, conjunctive and disjunctive normal forms, resolution, Horn clauses. Equational logic, unification, term rewrite systems, the Knuth-Bendix procedure. Predicate clause logic. Logic with quantifiers. Historical overview of (the modern) logic and computing.

Literature: S. Burris, *Logic for Mathematics and Computer Science*, Prentice Hall, 1998

Course type: lectures (30 hours), problem sessions (15 hours)
Assessment method: two tests during the semester, final exam
Prerequisites: Linear Algebra
Primary target group: MSc students in Computer Science or Mathematics
Lecturer: Katarzyna Pałasińska, PhD
Contact person: Katarzyna Pałasińska, e-mail: kpalasinska@gmail.com
Deadline for application: 15th of January