TITLE OF THE COURSE:	OPTIMIZATION METHODS
Course code:	MAT3016
Course group:	C
Faculty:	Faculty of Informatics
Study program:	Mathematics and its Application
Level:	Bachelor's
Semester:	Autumn
ECTS credits:	6
Language of instruction	English, Lithuanian
Course lecturer/s:	Assoc. prof. dr. Sigita Pečiulytė
Short course description:	Acquired knowledge of basic concepts of optimization theory.
Course content:	Concept of optimization problem. Main types of optimization problems. Convex sets and functions. Linear programming. Graphical solution method of linear programming problem. Simplex method. Dual Simplex method. Transportation problems. Discrete optimization. Integer programming. Network models. Multicriteria optimization. Nonlinear programming.
Grading and evaluating student work in class and/or at the final exam:	Final written exam (50%), mid-term written exam (25%), assessment of practical work (25%).
Required reading and additional study material	H.A. Eiselt, C.L. Sandblom. Linear programming and its applications Springer, 2007. D. Bertsekas. Nonlinear programming Athena Scientific, 1997.
Additional information (if applicable)	