Title **Mathematices**	Code **1010321211010340121**
Field **Electrotechnics**	Year / Semester **1 / 1**
Specialty **-**	Course **core**
Hours Lectures: **4** Classes: **3** Laboratory: **-** Projects / seminars: **-**	Number of credits **6**
	Language **polish**

Lecturer:

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Status of the course in the study program:

Obligatory course of the study programs for the branch ?Electrotechnics?.

Assumptions and objectives of the course:

Knowledge of theory of complex numbers, matrices, determinants, systems linear of equations, differential and integral calculus of functions of one variable, analytic geometry and numerical series.

Contents of the course (course description):

Complex numbers and algebric equations. Matrices, determinants of matrices, systems of linear equations. Differential calculus of functions of one variable: numerical sequences, limits and continuity of functions, derivatives and differentials, Taylors formula, montonic functions, local and absolute extrema, convexity, asymptotes.

Integral calculus of functions of one variable:indefinite integral, integration methods. The definite integral: definition, properties and applications. Numerical series.

Analytic geometry: vectors, straight line, plane, sufraces of second order.

Introductory courses and the required pre-knowledge:

Elementary functions, basic knowledges from algebra and trygonometry.

Courses form and teaching methods:

Lectures and classes.

Form and terms of complete the course - requirements and assessment methods:

Written tests, examination.

Basic Bibliography:

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Additional Bibliography:

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