

Title (Matematyka)	Code 1010104131010340652
Field Civil Engineering Extramural First-cycle Studies	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 1 Classes: 20 Laboratory: - Projects / seminars: -	Number of credits 7
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

-Basic course, mandatory subject.

Assumptions and objectives of the course:

-Basic command in the notions and methods of: mathematical analysis in functions of a real variable and several variables, elements of calculus of probability and mathematical statistics. Preparing students for further studies.

Contents of the course (course description):

-Ordinary differential equations of the second order, for example - differential equation of deflection of the beam. Double, triple, curve and surfaces integrals. Green's theorem. Applications of definite integrals to (Definite integrals applications to): volume of solids, first moments and centroids, moments of inertia (second moments of area) of plane cross sections of the beams.

Infinite series of: numbers, functions, in particular power series - Taylor's theorem. Elements of calculus of probability and mathematical statistics.

Introductory courses and the required pre-knowledge:

-Basic knowledge in mathematics from high School (Advanced course), as well as from the first and the second semesters of mathematic knowledge.

Courses form and teaching methods:

-Lectures, classes.

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

-Oral and written exams, CATs- Continuous Assessment Tests.

Basic Bibliography:

Additional Bibliography: