

Title Mathematics	Code 1010134231010340397
Field Environmental Engineering Extramural First-cycle studies	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 2 Classes: 20 Laboratory: - Projects / seminars: -	Number of credits 6
	Language polish

Lecturer:

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Status of the course in the study program:

General course.

Assumptions and objectives of the course:

To give a knowledge of the mathematical analysis.

Contents of the course (course description):

1. Functions of several variables, continuity.
2. Partial derivatives, total differential of a function, applications of the differential to approximate computations, directional derivatives.
3. Extrema of functions of several variables.
4. Multiple integrals and some applications.
5. Vector fields and topics: potential, curl, divergence and gradient.
6. Differential equations: basic concepts and linear differential equations of the first order.

Introductory courses and the required pre-knowledge:

Fundamental knowledge in mathematical analysis and linear algebra

Courses form and teaching methods:

Lectures and classes.

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

Examination (both oral and written) tests.

Basic Bibliography:

Additional Bibliography: