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| Title Mathematics | Code 1010134221010340391 |
| Field Environmental Engineering Extramural First-cycle studies | Year / Semester 1 / 2 |
| Specialty - | Course core |
| Hours Lectures: 2 Classes: 20 Laboratory: - Projects / seminars: - | Number of credits 5 |
| | Language polish |

Lecturer:

Marian Liskowski Ph.D.
Institute of Mathematics
60-965 Poznań, Piotrowo 3A
tel. (061) 665 2320
e-mail: marian.liskowski@put.poznan.pl

Faculty:

Faculty of Civil and Environmental Engineering
ul. Piotrowo 5
60-965 Poznań
tel. (061) 665-2413, fax. (061) 665-2444
e-mail: office_dceef@put.poznan.pl

Status of the course in the study program:

General course.

Assumptions and objectives of the course:

To give a knowledge of the linear algebra and analytic geometry.

Contents of the course (course description):

1. Complex numbers.
2. Elementary linear algebra: matrix algebra, systems of linear equations, determinants, vector spaces, eigenvalues and diagonalization, linear transformations.
3. Elements of vector algebra: scalar and vector product, mixed product.
4. Fundamentals of solid analytic geometry: the equations of a surface and a line in space, the general equation of a plane, equations of a straightline in space. The equations of quadric surfaces.
5. Series function: power series and the Fourier series.

Introductory courses and the required pre-knowledge:

Fundamental knowledge in the mathematics.

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: