

Title (Matematyka)	Code 1010104111010340642
Field Civil Engineering Extramural First-cycle Studies	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 2 Classes: 22 Laboratory: - Projects / seminars: -	Number of credits 8
	Language polish

Lecturer:

-dr inż. Ewa Magnucka-Blandzi
Institute of Mathematics,
Poznan University of Technology

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:

-Basic course, mandatory subject.

Assumptions and objectives of the course:

-Basic command in the notions and methods of: linear algebra with analytic geometry's elements, and mathematical analysis in functions of a real variable. Preparing student's to undertake studies during the second semester.

Contents of the course (course description):

-Elements of linear algebra: calculus of matrices, determinants, systems of linear equation and their solution's methods, singular and inverse matrices, eigenvalues problem for symmetric matrices. Complex numbers. Elements of analytic geometry in three-dimensional space. Sequences of real numbers. Limits and continuity of functions. Differentiation of functions of a real variable: derivatives, extremes, monotony and convexity of functions.

Introductory courses and the required pre-knowledge:

-Mathematical basic knowledge from High School (Advanced course).

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: