

Title (Structural Analysis)	Code 1010102111010100232
Field Civil Engineering II stopień	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 2 Classes: 1 Laboratory: - Projects / seminars: 1	Number of credits 4
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

Obligatory course for students of 2. Degree Civil Engineering studies

Assumptions and objectives of the course:

Presentation of matrix methods for analysis of statics and stability of bar structures and the foundations of analysis of space girders by FEM and BEM.

Contents of the course (course description):

Matrix version of the stiffness method. Bending of plane frames with large axial forces. Initial stability of frames by the matrix method. Finite strip method for the analysis of plates. Analysis of boundary disturbances in the membrane state of forces for shells of revolution. Foundations of the boundary element method. Cable structures.

Introductory courses and the required pre-knowledge:

Knowledge from the subjects: Strength of Materials and Structural Mechanics from the 1. Degree studies.

Courses form and teaching methods:

Lectures, example classes, projects

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

Tests, exercises, examination

Basic Bibliography:

Additional Bibliography: