Title	Code
Strength of Materials II	**1010102121010110436**
Field: **Civil Engineering Second-cycle Studies**	Year / Semester: **1 / 2**
Specialty: **Structural Engineering**	Course: **core**
Hours: Lectures: **1** Classes: **-** Laboratory: **-** Projects / seminars: **2**	Number of credits: **5**
	Language: **polish**

Lecturer:

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Status of the course in the study program:

Obligatory course for students of Building and Engineering Structures and Construction Engineering and Management

Assumptions and objectives of the course:

Development of knowledge acquired at the first level of studies. The student should be able to choose and apply a proper model depending on the real material and its state of stress and strain.

Contents of the course (course description):

Models of materials: linear elastic, nonlinear elastic, elastic-ideal plastic, rigid-ideal plastic, plastic with hardening, brittle. Application of these models to simple cases: axial force and bending moment in beams. Rheological models. Introduction to fracture mechanics. Anisotropic materials, composites. Cyclic loads.

Introductory courses and the required pre-knowledge:

Knowledege of strength of materials and mathematics according to program of previous courses

Courses form and teaching methods:

lectures and projects

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

evaluation of projects, written tests

Basic Bibliography:

Additional Bibliography: