

Title (Konstrukcje metalowe II)	Code 1010101161010110461
Field Civil Engineering First-cycle Studies	Year / Semester 3 / 6
Specialty Structural Engineering	Course core
Hours Lectures: 1 Classes: - Laboratory: - Projects / seminars: 2	Number of credits 5
	Language polish

Lecturer:

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Faculty:

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Status of the course in the study program:

Metal Structures

Assumptions and objectives of the course:

Purpose of faculty is presentation of basic methods of design and dimensioning of steel construction elements and introduction of steel rolling beams, welded girder, column axis and eccentric loaded, simple frame construction, composite steel-concrete construction.

Contents of the course (course description):

According to faculty performed are:

- general rules of design and dimensioning steel rolling beams, welded girder, column axis and eccentric loaded, connection of beam, head and base columns,
- basic information about method of design and dimensioning of bracing in hall building
- question of global stability of beams,
- rules of design and dimensioning of simple frame (static diagrams, loads, dimensioning of columns eccentric loaded and frame girder, detail connection)
- type of transport in industry building (gantry),
- basic information about design of composite steel-concrete construction with regard of fire protection.

Introductory courses and the required pre-knowledge:

Basic knowledge about structure mechanic and strength of material and information presented in previous term of Metal Structures. Dimensioning of welded and screw connections and knowledge about local and global stability.

Courses form and teaching methods:

Lectures illustrated by slides. Exercise design of steel rib ceiling (floor). Presentation of construction solution and dimensioning rules.

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

Final exam.
Grade for project of truss with defense.

Basic Bibliography:

Additional Bibliography: