

Title <b>(Konstrukcje metalowe II)</b>	Code <b>1010101151010110451</b>
Field <b>Civil Engineering First-cycle Studies</b>	Year / Semester <b>3 / 5</b>
Specialty <b>Structural Engineering</b>	Course <b>core</b>
Hours Lectures: <b>1</b> Classes: -    Laboratory: -    Projects / seminars: <b>2</b>	Number of credits <b>3</b>
	Language <b>polish</b>

**Lecturer:**

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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 compressed, tensioned (truss, bracing) and bent bars (purlin).

**Contents of the course (course description):**

According to faculty performed are:

- general rules of design and dimensioning steel construction ( limiting condition, static diagram, calculate assumption, resistance hypothesis,
- basic information about method of design and dimensioning of compressed, tensioned, bent, eccentrically compressed and tensioned steel bars.
- question of loosing local stability of compressed bars and bent bars and global stability of compressed bars,
- rules of design and dimensioning trusses and elements of roofs construction (purlin, bracing), design of knots in truss construction,
- question of anticorrosive and 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.

**Courses form and teaching methods:**

Lectures illustrated by slides. Exercise design of steel truss with elements of roof construction. concrete floor. Presentation of construction solution and dimensioning rules.

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

Grade of project of truss with defense.

**Basic Bibliography:**

**Additional Bibliography:**

