Title **(Konstrukcje metalowe II)**	Code **1010101151010110519**
Field **Civil Engineering First-cycle Studies**	Year / Semester **3 / 5**
Specialty **Construction Engineering and Management**	Course **core**
Hours Lectures: **1** Classes: **-** Laboratory: **-** Projects / seminars: **2**	Number of credits **3**
	Language **polish**

Lecturer:

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Status of the course in the study program:

-Specific subject on First-cycle studies

Assumptions and objectives of the course:

-The main goal of the course is to present basic methods of design of steel structural elements under compression (columns), tension (bars),bending (beams)and combined compression and bending (beam-columns)and explain local and global buckling phenomena of compressed and bended elements.

Contents of the course (course description):

-During the course there are presented:
- general rules of design and dimensioning steel structures (limit states, static systems, assumption for calculation, strength hypothesis)
- basic information about method of design and dimensioning of compressed, tensioned, bended, eccentrically compressed and tensioned steel elements
- problems of local and global stability of beams in bending compressed bars and beam-columns under combined compression and bending
- rules of design and dimensioning of streel construction of floors (floor beam, girder), trusses and 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 structural mechanic, strength of material and information presented at previous term of Metal Structures.

Courses form and teaching methods:

-Lectures illustrated by slides included theory and examples of real structures. The exercise in design of steel structure elemnents of floor.

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

-Examination. Exercises priced on the base of quality of prepared by student design exercise and discussion.

Basic Bibliography:

Additional Bibliography: