

Title <b>(Konstrukcje cienkościenne i zespolone)</b>	Code <b>1010102111010110435</b>
Field <b>Civil Engineering Second-cycle Studies</b>	Year / Semester <b>1 / 1</b>
Specialty <b>Structural Engineering</b>	Course <b>core</b>
Hours Lectures: <b>2</b> Classes: -    Laboratory: -    Projects / seminars: <b>2</b>	Number of credits <b>3</b>
	Language <b>polish</b>

**Lecturer:**

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**Faculty:**

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**Status of the course in the study program:**

course on stationary studies II degree

**Assumptions and objectives of the course:**

Presentation of basic designing method of steel-concrete composite and thin-walled structures. General rules of design and dimensioning of steel - concrete composite and thin-walled elements such as columns and beams under centrally and eccentrically compression, and bending.

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

According to faculty performed are:

- general rules of design and dimensioning of steel-concrete composite construction
- (limiting condition, static diagram, calculate assumption)
- damage analysis of steel-concrete composite structures and resistance hypothesis,
- basic information about method of design and dimensioning of ressed, eccentricly compressed, bent and shear elements
- load capacity analysis of connectors in composite structures
- general rules of design of thin-walled construction (limiting condition, static diagram, calculate assumption)
- question of loosing local stability of compressed and bent elements and global stability of compressed, eccentrically compressed and bending thin - walled bars,
- rules of design and dimensioning of roofs construction elements connections (purlin, bracing),
- 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 I semester 4,5,6.

**Courses form and teaching methods:**

Lectures illustrated by slides(steel-concrete composite construction - 15h, thin-walled construction - 15h). Exercise design of. steel-concrete composite floor 15h, exercise design of. thin-walled frame structure - 15h). Presentation of construction solution and dimensioning rules.

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

Examination, two projects, test

**Basic Bibliography:**

**Additional Bibliography:**