

Nazwa w jęz. angielskim: Steel Structures IIb (Advanced Course)

Nazwa w języku polskim: Konstrukcje stalowe IIb (kurs zaawansowany)

Dane dotyczące zajęć:

Information on course:

Jednostka oferująca: Wydział Budownictwa // dr inż. Szymon Swierczyna

Course offered by: Faculty of Civil Engineering // dr inż. Szymon Swierczyna

Język wykładowy:
angielski
Language:
English
Strona WWW:
Course homepage:
Skrócony opis:
Short description:
The aim of the course is to provide students with the basic knowledge and practical skills necessary in the design of steel structures, particularly industrial low-rise buildings with and without overhead cranes.
Opis:
Description:
Lecture LECTURE: 15h Basic of frame joint design, Structural fire design, Design of bracing, Steel-concrete composite structures, Plate girders with corrugated web. CLASSES: 3h Presentation of the scope and details of the steel hall design: truss field splice, roof bracing, shop drawing of the truss. PROJECT: 12h Design of truss field splice and roof bracing, shop drawing of the truss scale 1:10.
Full-time studies: 30h
Number of ECTS credits: 3
Literatura:
Bibliography:
[1] Handbook of Structural Steelwork. Eurocode Edition. BCSA Publication No. 55/13. [2] ECCS: Design of Joints in Steel Structures, Ernst & Son, 2017. [3] M.E. Brettell, D.G. Brown: Steel Building Design: Concise Eurocodes In accordance with Eurocodes and the UK National Annexes. Steel Construction Institute SCI P362. [4] EN 1993-1-1 Eurocode 3: Design of steel structures. Part 1-1: General rules and rules for buildings. [5] EN 1993-1-5:2003 Eurocode 3: Design of Steel Structures. Part 1-5: Plated structural elements. [6] EN 1993-1-8 Eurocode 3: Design of Steel Structures. Part 1-8: Design of Joints.
Efekty uczenia się:
Learning outcomes:
KNOWLEDGE (1) Student knows the principles of structural design of selected steel and steel-concrete composite members - [K1A_W05], (2) Student knows the standards and guidelines for the design of selected steel and steel-concrete members - [K1A_W06], (3) Student knows basics of structural fire design of steel structures - [K1A_W05]. SKILLS (4) Student can design selected structural steel members and joints - [K1A_U04], (5) Student can design simple steel-concrete composite structure - [K1A_U04], (6) Student can establish fire resistance of steel structure with simple EC3 methods - [K1A_U02].
Metody i kryteria oceniania:

Assessment methods and assessment criteria:
CONDITIONS FOR PASSING THE COURSE: 1) active participation in the lecture, classes and project, 2) passing the colloquium, 3) correct execution and defense of the project, FINAL GRADE: 60% (colloquium) + 40% (project)

Przynależność do grup przedmiotów w cyklach:
Element of course groups in various terms:

Opis grupy przedmiotów Course group description	Cykl pocz. First term	Cykl kon. Last term
przedmioty obieralne studia stacjonarne stopień studiów – dowolny kierunek studiów – dowolny, semestr dowolny	2024/2025	