

SYLLABUS

Name: *Fire Protection in Construction (BudAB>SI8FPRIC19)*

Name in Polish:

Name in English: *Fire Protection in Construction*

Information on course:

Course offered by department: Faculty of Civil Engineering
Course for department: Silesian University of Technology

Default type of course examination report:

ZAL

Language:

English

Course homepage:

<https://platforma.polsl.pl/rb/>

Short description:

Main aim of the subject is getting know basic definitions and design principles for fire safety of buildings and fire protection of building construction elements with regard to building regulations.

Description:

So that to realize the undertaken aim as above, the lecture materials are delivered and explained and commented during Lectures (20 hours).

Lectures presents basic ideas, definitions and problems connected with fire spreading in buildings, regulations about fire resistance of structural and finishing elements, limiting of fire spread and evacuation (escape ways), and protection of structural elements and chimney ducts.

During seminars (10 hours) lecturer subjects are trained in form of the project on assessment of fire safety of apartment building designet during the subject 'Buildings and physics of buildings'.

Bibliography:

Polish literature:

- Klemm P. : „Budownictwo ogólne. Tom 2, Fizyka budowli”. Warszawa, Arkady, 2005.
- Laurowski T.: „Vademecum ochrony przeciwpożarowej”. Wyd. Kabe, Krosno 2006
- Rozporządzenie Ministra Infrastruktury z dnia 12 kwietnia 2002, Warunki techniczne jakim powinny odpowiadać budynki i ich usytuowanie.
- Instrukcja ITB 221/ 79 "Wytyczne oceny odporności ogniowej elementów konstrukcji budowlanych"
- Instrukcja ITB 409/2005 "Projektowanie elementów żelbetowych i murowych z uwagi na ich odporność ogniową".

Foreign literature:

- Powell-Smith V., Billington M.J.: „The building regulations. Explained & Illustrated. Based on building regulations 1991". Oxford, Blackwell Scientific Publications, 1992
- Marchant E.W.: „A complete guide to fire and buildings". Medical and Technical Publishing Co Ltd. Lancaster, England
- Langdon-Thomas G.L.: „Fire safety in buildings. Principles & practice". London, Adam & Charles Black, 1972
- Addleson L.: „Materials for building. Vol.4, Heat and fire and their effects". London, Newnes-Butterworths, 1976

Learning outcomes:

KNOWLEDGE:

- (1) Knows the basic regulations (standards, guidelines) about fire safety of buildings and the principles of design of building elements (structural and non structural) with regard a fire protection [directional effect K1A_W06].
- (2) Knows about methods and materials for fire proof of building elements (structural and finishing) [directional effect K1A_W06].
- (3) Knows the principles of design and dimensioning of building structural elements made from concrete and masonry with regard to fire proof [directional effect K1A_W06].

SKILLS:

- (4) Is able to select and use fire proof construction materials in design in accordance to fire safety regulations [directional effect K1A_U02].
- (5) Is able to assess risks during the realization of works and to implement appropriate safety rules. Is able to take into consideration a fire risk in buildings and to implement appropriate fire safety rules in design of buildings and their elements. [directional effect K1A_U11].
- (6) Is able to formulate opinions regarding technological processes in civil engineering about fire protection regulations and methods [directional effect K1A_U11].

Assessment methods and assessment criteria:

ENTRANCE REQUIREMENTS: Passing the course "Buildings and Physics of Buildings"

REQUIREMENTS TO PASS THE COURSE:

Lectures: Passing Final test

Seminars: Attendance the Tutorials and preparing and passing the Project

Final grade = 40 % Final Test + 60 % Project

To have partial grades transferred, students should contact the teacher within the first two weeks of the semester.

The syllabus is valid from the summer semester of the 2025/2026 academic year, and its content is not subject to change during the semester.

Element of course groups in various terms:

Course group description	First term	Last term
<i>missing group description in English</i> (BudAB-S1-2019-sem8)	2024/2025-L	

Course credits in various terms:

<without a specific program>			
Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	2	2022/2023-L	