

## SYLLABUS

**Name:** *Problem Seminar (BudAB>SI2PROSEM19)*

**Name in Polish:**

**Name in English:** *Problem Seminar*

### Information on course:

**Course offered by department:** Faculty of Civil Engineering  
**Course for department:** Silesian University of Technology  
**Term:** Summer semester 2025/2026  
**Cordinator of course edition:** Prof. dr hab. inż. Jan Kubica

### Default type of course examination report:

ZAL

### Language:

English

### Course homepage:

<https://platforma2.polsl.pl/rb/course/view.php?id=738>

### Short description:

Students are required to prepare a presentation on a topic assigned by the instructor. Students give a presentation to other students with critical commentary on the subject.

### Description:

Brief list of topics to be covered

1. Civil engineering design
2. Timber as structural material
3. Masonry structures
4. Masonry as structural composite material
5. Steel as structural material
6. Ceramics as structural material
7. Glass as structural material
8. Concrete as structural material
9. Manufacturing of concrete
10. Concrete foundation
11. Thermal insulation in buildings
12. Machinery on construction site
13. Buildings' roof types
14. Waterproofing in buildings
15. Ecological materials in civil engineering

### Bibliography:

- Seward D.: Understanding structures, Analysis, Materials, Design, Palgrave Macmillan, 2014
- Ashby M.F., Jones D.R.H.: Engineering Materials 1, An Introduction to Properties, Applications and Design, Butterworth-Heinemann, 2012
- Ashby M.F., Jones D.R.H.: Engineering Materials 2, An Introduction to Microstructures and Processing, Butterworth-Heinemann, 2013

### Learning outcomes:

(K1A\_U14, K1A\_K03)

The student can:

1. use their knowledge - formulate and solve complex and unusual problems and perform tasks in conditions not fully predictable by:
  - appropriate selection of sources and information derived from them, evaluation, critical analysis and synthesis of this information,
  - selection and application of appropriate methods and tools, including advanced information and communication technologies
2. make a critical evaluation of knowledge and recognition of the importance of knowledge in solving cognitive and practical problems, improving professional and personal competences, developing language skills and formulating expert opinions on technical and technological processes carried out in the construction industry

### Assessment methods and assessment criteria:

PREREQUISITES: No requirements

### COURSE PASS REQUIREMENTS:

- 1) attendance in class
- 2) regular consultation on the progress of work on the seminar
- 3) presentation of their work in the form of a multimedia presentation

FINAL GRADE: is based on the evaluation of presentation given by a student.

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

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

### Information on course edition:

### Default type of course examination report:

ZAL

### Bibliography:

*missing bibliography in English*

### Details of classes and study groups

seminar (15 hours)

## Study groups details

*missing study groups details*

### Element of course groups in various terms:

Course group description	First term	Last term
<i>missing group description in English</i> (BudAB-S1-2019-sem2)	2020/2021-L	

### Course credits in various terms:

<without a specific program>			
Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	2	2020/2021-Z	