SYLLABUS

Name: ***Selected Engineering Problems - Fundamentals of Urban Planning and Architecture (BudAB>SI2SEPFOU19)***

Name in Polish:

Name in English: ***Selected Engineering Problems - Fundamentals of Urban Planning and Architecture***

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/course/view.php?id=684

Short description:

Acquiring the knowledge of issues related to urban planning composition and basic issues of urban planning; the ability to forming the form of urban space and architectural objects; practice the ability to use the compositional means to achieve the intentional aim, practice the drawing skills; improving skills of drawing the space.

Description:

LECTURE:15 hours
Presentation of design process, including basic tools of engineer work and the main issues related to designing the architectural and urban planning form. Relations between human and architecture and design rules consistent to ergonomics. Presentation of basic principles of architectural composition. Presentation of basic principles of urban planning composition. Introduction to issues of development of diverse and often conflicting against each other directions and trends of contemporary architecture and urban planning, including its beginnings, sources of inspiration, program objectives and directions of development. Guidelines for conscious perception and shaping of urban space and theoretical basis for designing basic architectural objects. Basics of shaping urban space, including a two-dimensional layout and three-dimensional structure in the context of the existing context, as well as functional and compositional connections of the developed space.
Introduction to urban design issues
Formation of basic elements of the human life space
Introduction to issues of architectural design
Principles of architectural design.Fundamentals of composition and architectural form.

PROJECT: 15 hours
There are three project to perform. Inventory of own flat (freehand sketch plan and section). Design concept for a small residential complex on a scale of 1:500.Design concept for a small public building - projection, elevations

Bibliography:

Basic literature
[1] Deitsch D. K.: Architecture For Dummies” Willey & Sons, 2002
[2] Neufert E., Neufert P.: “Neufert Architects’ Data” John Willey & Sons, 2012
[3] Yin J.: “Urban Planning for Dummies” John Willey & Sons, 2012
Online teaching materials
[4] Interactive and animated drawing teaching tools realized in the Erasmus+ project No 2017-1-LT01-KA202-035177 - https://liggd.lt/diad-tools/gb/training-materials

Learning outcomes:

KNOWLEDGE
(1) Understands and knows the basics of architectural and urban design, the principles of creating the architectural part of the design documentation of a construction object - [directional effect K1A_W02].
ABILITIES
(2) Able to prepare graphic documentation in the environment of selected CAD and BIM programs and to prepare a design study presenting the design idea - [directional effect K1A_U07].
COMPETENCE
(3) Is ready for 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 [directional effect K1A_K03].

Assessment methods and assessment criteria:

PRELIMINARY REQUIREMENTS:
No requirements

COURSE CREDIT REQUIREMENTS
1) The condition for passing the design classes is to obtain positive grades from all project work carried out at the design classes and design work carried out at home.
2) Design classes are compulsory. Absence at design classes should be made up in the manner indicated by the person conducting the design classes.
3) Positive marks from lectures and project classes are required to obtain a positive final mark for the course.
4) The grade for the project classes is determined on the basis of the average of partial grades for the project works carried out during the laboratory classes and the project works carried out at home.
5) The final grade for the course is determined on the basis of grades from lectures and project activities. The final grade is determined on the basis of the average of partial grades referred to above.
PARTIAL ASSESSMENTS:
a) Project (arithmetic mean of three sub-projects)
b) Presentation (excercises)

FINAL GRADE:
80% (project) + 20% (presentation)

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

Element of course groups in various terms:

Course group description	First term	Last term
missing group description in English (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	