



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Architectural Design

### Course

Field of study

Year/Semester

Civil Engineering

1/2

Area of study (specialization)

Profile of study

-

general academic

Level of study

Course offered in

First-cycle studies

Polish

Form of study

Requirements

full-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

15

Tutorials

Projects/seminars

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

dr inż. Monika Siewczyńska

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Wydział Inżynierii Lądowej i Transportu

ul. Piotrowo 5 Poznań

### Prerequisites

Students beginning this course should have basic knowledge of engineering and CAD graphics and introduction to building design. The student should have skills in reading architectural and construction drawings.

### Course objective

To provide students with basic knowledge of architectural design. Enable students to develop the ability to model buildings in 3D.

### Course-related learning outcomes

Knowledge

1. Is well acquainted with the principles of technical drawing concerning the creation and reading of



architectural and construction drawings and their preparation using BIM (Building Information Modeling) technology

2. Is familiar with the elements of technical conditions, as well as the basic concepts and principles of copyright protection
3. Has basic general knowledge of spatial planning, the relationship between architecture and the technical possibilities of construction

#### Skills

Can obtain information from literature and other appropriately selected sources.

#### Social competences

1. Is able to identify priorities for the implementation of his/her own and other tasks
2. Understands the need for copyright protection

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The knowledge acquired during the lectures is verified by two 45-minute colloquia carried out during the 7th and 15th lectures. Each of the colloquia consists of 5-10 questions (test or open), differently scored. The credit threshold: 50% of points. The lectures outlines on the basis of which the questions are developed will be sent to students via e-mail using the university's e-mail system.

In the case of e-learning, it is possible to change the method of passing the lectures in quizzes - after each lecture. The points obtained from the individual quizzes are added up and the final grade is determined on their basis.

Maximum number of points for each quiz: 3 points.

Number of quizzes: 7

Scoring - evaluation:

20-21 - 5,0

18-19 - 4,5

16-17 - 4,0

14-15 - 3,5

12-13 - 3,0

0-11 - 2,0

#### Programme content

Architectural design theory.



Determinants of shaping the form, function and structure of a building.

Aesthetics of public space.

Building design process.

Participants of the design process.

The influence of installation and finishing elements and the role of lighting and colour in interiors.

Accessibility of the facility for the disabled.

Legal regulations concerning single-family buildings.

Copyright in architecture design.

Development of a building plot.

3D modelling of a single-family building.

### Teaching methods

Lectures - informative lecture with a multimedia presentation. 3D modelling - demonstration and e-learning with instruction.

### Bibliography

Basic

1. Neufert E., Podręcznik projektowania architektoniczno-budowlanego, Arkady, 2004
2. Żórawski J., O budowie formy architektonicznej: skrócone ujęcie opracowanie przez Bohdana Lisowskiego, Wyd. Politechniki Krakowskiej, 2017
3. Rozporządzenie w sprawie warunków technicznych jakim powinny odpowiadać budynki i ich usytuowanie

Additional

1. Markiewicz P., Kształtowanie architektury poprzez zmianę rozwiązań budowlanych, Archi-Plus, 2006
2. Markiewicz P., Projekt jednego domu w pięciu technologiach : vademecum projektanta, Archi-Plus, 2002



### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for classes, preparation for tests and project preparation) <sup>1</sup>	35	1,5

<sup>1</sup> delete or add other activities as appropriate