

POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Design Studio in Conservation in Architecture and Urban Planning [S2Arch2>PKwAiU]

Course

Field of study Year/Semester

Architecture 1/2

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

second-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other 0

0

Tutorials Projects/seminars

0 45

Number of credit points

3,00

Coordinators Lecturers

Prerequisites

Structured, theoretically underpinned general knowledge covering key issues in architectural design. Detailed knowledge in the fields of study related to the studied course. Basic knowledge necessary to understand social, economic; - legal and non-technical conditions of architectural design - obtaining information from literature, databases and other, properly selected sources, including in English, integrating information, interpreting it, as well as drawing conclusions and formulating and justifying opinions; ability to make correct conclusions on the basis of data from various sources. Knowledge of the history of architecture and urbanism.

Course objective

To familiarize students with traditional techniques, building structures and historical architectural detailing. To familiarize students with the issues of historic preservation and adaptation of historic buildings. To recognize issues, contemporary trends and tendencies in the design of historic buildings. Developing the ability to recognize the potential of the existing architectural and urban structure: analyzing the various connections, found values and conditions in the existing object and its surroundings such as cultural context, existing functional problems and socio-economic aspects. Learning how to find a balance between technical, conservation, functional and aesthetic requirements that must be taken into account when adapting a historic or historical object for contemporary purposes. Perfecting the skills of simulation and multi-variant formation of an architectural concept. Acquisition and training of skills of constructing the utility program of an object with a complex function, training of skills of functional integration with the existing object and surroundings. Acquiring the ability to creatively look at the form, function and construction of the building in the spatial and cultural context, taking into account the doctrinal premises and the historical value of the object.

Course-related learning outcomes

Knowledge:

Architectural design of varying degrees of complexity, from simple tasks to objects with complex function in a complex context, in particular: simple objects taking into account the basic needs of users, single- and multi-family residential buildings, service buildings in residential complexes, public buildings and their complexes of varying scale and complexity in an open landscape or urban environment; The principles of universal design, including the idea of designing spaces and buildings accessible to all users, especially people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including the parameters necessary to ensure full functionality of the designed space and facilities for all users, especially people with disabilities;

Advanced methods of analysis, tools, techniques and materials necessary for the preparation of design concepts in an interdisciplinary environment, with particular emphasis on interprofessional collaboration.

Basic methods and techniques for the preservation, modernization, and restoration of historic architectural structures.

The interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines, as well as its application in the design process in cooperation with specialists in these fields

Skills:

Design simple and complex architectural objects, creating and transforming space to give it new values according to a given or accepted program, taking into account the requirements and needs of all users. Critically analyze conditions, including the valorization of the state of land development and buildings; formulate conclusions for design and spatial planning, forecast processes of transformation of the settlement structure of cities and villages, and predict the social effects of these transformations. Develop a conservation design concept for the transformation of architectural and urban structures with cultural values, taking into account the protection of these values and appropriate methods and techniques, in accordance with the adopted program that takes into account non-technical aspects. Critically analyze and evaluate the design and the method of its implementation in the field of modernization and additions to architectural and urban structures with cultural values. Think and act creatively, taking into account the complex and multifaceted conditions of design activities, as well as express one's own artistic concepts in architectural and urban design. Integrate information obtained from various sources, interpret and critically analyze it in detail, draw conclusions from it, formulate and justify opinions, and demonstrate their relationship to the design process, based on the available scientific achievements in the discipline. Work individually and in a team, including with specialists from other industries, and take on a leading

role in such teams.

Estimate the time needed to complete a complex design task.

Formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.

Implement the principles and guidelines of universal design in architecture, urban planning and spatial

Implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.

Social competences:

Effectively use imagination, intuition, creativity and independent thinking to solve complex design problems:

Take on the role of coordinator of activities in the design process, manage teamwork and use interpersonal skills (conflict resolution, negotiation skills, delegation of tasks), comply with the principles of teamwork and take responsibility for joint tasks and projects.

Taking responsibility for shaping the natural environment and cultural landscape, including preserving the heritage of the region, country and Europe

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment

The final grade is calculated as a weighted average of partial grades on the basis of the following criteria - formative grades (accepted grading scale: 2.0; 3.0; 3.5; 4.0; 4.5; 5.0):

- 1. Active participation in classes (10%) confirmed by attendance at at least 2/3 of classes. Unexcused absence from more than 3 classes may result in a 0.5-1.0 grade reduction in the final grade.
- 2. Assessment of reliability and responsibility for the implementation of assigned sub-tasks in the research and project group (20%) assessment of social competence, ability to cooperate and take responsibility for joint activities.
- 3. assessment of the research report of the term paper textual and graphic part (40%) substantive analysis, quality of the study, compliance with the objectives of the project, ability to synthesize and present the results.
- 4. Involvement and substantive contribution to the work of the research team (10%) formative assessment, made on the basis of observation of activity and quality of participation in the activities of the group. 5. quality of presentation of research results to the group (15%) evaluation is made on the manner of communication, skill of argumentation, consistency of message and visual form of presentation.

The summary grade is calculated as a weighted average of the above elements. The adopted grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0 Percentage thresholds:

Rating 2.0 (insufficient) - 0-50%

Rating 3.0 (sufficient) - 50-60%

Rating 3.5 (sufficient plus) - 60-70%

Rating 4.0 (good) - 70-80%

Rating 4.5 (good plus) - 80-90%

Rating 5.0 (very good) - 90-100%

Programme content

A review of basic concepts and definitions related to the issues of heritage protection and conservation design. Legal framework for design activities. Presentation of conservation doctrines, theoretical and technical issues, as well as contemporary practical tendencies and trends in the design of historic buildings. Introduction to architectural research and modern techniques of inventorying monuments. Discussion of issues related to contemporary conservation projects, design in historic buildings and in historical surroundings. The problem of conservation design and its complexity.

Course topics

The student has the opportunity to choose the topic of the project (in line with the general subject profile) and can change the project group with the consent of the teacher. The execution of the restoration project of the selected historic building includes:

- selection of the historic building (several buildings to choose from)
- selection of the new function of the modernized historic building
- the analytical part, including analysis of the existing condition of the object and its surroundings,
- study of the surroundings, the existing land use plan, the size of the area to be developed, the structural layout, the existing material solutions, the authentic material substance, etc., taking into account conservation requirements
- the synthetic (design) part, including the definition of the functional and spatial structure in the object in the following stages:

- creation of a functional program for the modernized object, division into zones, etc.
- development of several conceptual variants
- Assigning the appropriate formal functional solutions to the functional zones and adapting them to the spatial and structural possibilities of the modernized building.
- Selecting the best functional and spatial solution.
- Presenting the architectural design using a graphic method on large-format boards, the format and scope of which are standardized.

Teaching methods

- 1. Project-based exercises allowing for the practical implementation of the issues discussed in lectures on the subject: Selected issues in the protection of heritage and conservation of historic buildings. The project is an individual consultation conducted in a student group. Discussion and correction of the solutions applied in the project with the participation of all students in the group; discussion of specific cases of repetitive design problems.
- 2. ekursy.put.poznan.pl (system supporting the teaching process and distance learning)

Bibliography

Basic:

Kadłuczka A., Ochrona dziedzictwa architektury i urbanistyki. Doktryny, teoria, praktyka , Kraków 2018. Małachowicz, E. Konserwacja i rewaloryzacja architektury w środowisku kulturowym, Wrocław, Oficyna Wydawnicza Politechniki Wrocławskiej 2007

Zin W., Kalinowski, Biegański P. (red.), Zabytki urbanistyki i architektury w Polsce. Odbudowa i konserwacja, t. 1, Miasta historyczne, Arkady, Warszawa 1986

Kondziela H., Stare Miasto w Poznaniu. Zniszczenia-odbudowa-program dalszych prac, Wydawnictwo Poznańskie, Poznań 1971.

Tomaszewski A., Wiek XX w konserwacji - konserwacja w XX wieku. Badania i ochrona zabytków w Polsce w XX wieku , Warszawa 2000

Additional:

Borusiewicz W., Konserwacja zabytków budownictwa murowanego, Arkady, Warszawa 1985 Klause G., Wybrane problemy ochrony zabytków początku XX wieku i odbudowa Poznania po II wojnie światowej. Architektura i urbanistyka Poznania w XX wieku, red. T. Jakimowicz, Poznań 2005 Podręcznik rewitalizacji. Zasady, procedury i metody działania współczesnych procesów rewitalizacji, Warszawa 2003

Rymaszewski B., Polska ochrona zabytków, Warszawa 2005

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00