



COURSE DESCRIPTION

1. Course title: ARCHITECTURAL DESIGN - MIXED-USE PUBLIC COMPLEXES (MODULES A,B)	2. Course code: RAR-A-SSII – I - ADMUPC
3. Validity of course description: 2018/2019	
4. Level of studies: MSc programme	
5. Mode of studies: Full-time studies	
6. Field of study: ARCHITECTURE	
7. Profile of studies: general academic profile	
8. Programme: -	
9. Semester: 1	
10. Faculty teaching the course: Faculty of Architecture, Department of Housing and Public Architecture Design	
11. Course instructor: Beata Majerska-Pałubicka PhD DSc Eng. Arch.	
12. Course classification: major	
13. Course status: compulsory	
14. Language of instruction: English	
15. Pre-requisite qualifications: completion of the Bachelor's degree programme in the field of Architecture	
16. Course objectives: Lecture: <p>To introduce students to the theory, principles and methodology of designing complex structures of public facility buildings, and familiarize them with the typological and conceptual approaches to design.</p> <p>To acquaint students with composite structures solutions, as well as technical, formal and legal conditions based on building standards.</p> <p>During lectures students acquire the knowledge of theories, principles and methodologies for designing complex structures of public facility buildings, including the typological and conceptual approach.</p> Design: <p>To introduce students to the methodology of designing complex structures of multifunctional public units on the basis of: initial assumptions, contextual analysis, utility programs, technical conditions, Building Law, formal and legal conditions.</p> Design Module A <p>Developing creativity and an individual approach to design problems, based on the principles of typological design, which are understood as:</p> <ul style="list-style-type: none"> • clear definition of space and solving a specific problem in an analytical, directive or generative way, 	



- learning to analyze, interpret and understand architectural ideas, learning to use directive / typological diagrams for conceptualising the design idea

Design Module B

Developing creativity and an individual approach to design problems, based on the principles of conceptual design, which are understood as:

- developing the architectural concept from an idea to the solution of a specific design problem,
- learning to analyze, interpret and understand architectural ideas, learning to use analytical and directive diagrams for conceptualising the design idea

Seminar:

To develop students' skills of critical project analysis at the stage of synthesis of the task.

To give students the opportunity to verify design ideas formulated at the stage of design problem transformation.

To teach students to confront their architectural aims with feasible solutions, in the context of sustainable development

To familiarize students with the criteria for verification - environmental effectiveness of the adopted design solutions.

To inspire awareness and understanding of contemporary requirements for architects and urban planners and responsibility for project decisions.

17. Description of learning outcomes:

Nr	Learning outcomes description	Method of assessment	Teaching methods	Learning outcomes reference code
1.	Knowledge of the dependencies between the analysis of output data and the design process	exam	lecture	K2A-W04
2.	Knowledge of the rules for designing architecture of public facility buildings (ergonomics, economics and rationality of design).	exam	lecture	K2A-W12
3.	Knowledge of construction law and technical and building regulations. Knowledge of the formal, legal and technical conditions necessary for designing public facility buildings.	exam project evaluation review score	lecture project	K2A-W03 K2A-K06
4.	Ability to prepare and develop a conception of a complex public facility building and its surroundings, which meets both aesthetic and technical requirements, including principles of sustainable development and facilities for the disabled. Ability to make correct decisions for the proper linkage created on the basis of the programme for functional groups in the object taken with the respect of rational, effective design principles. Ability to	project evaluation review score	project	K2A-U01 K2A-U04 K2A-U06 K2A-U11



	create a strong, unambiguous concept for an object			
5.	Ability to consider the location and climate conditions in the development of a design concept. Ability to prepare a correct analysis of the external conditions for the proposed location and to use this analysis in the process of creating a design concept.	project evaluation review score seminar evaluation	project seminar	K2A-U02 K2A-U05 K2A-U13 K2A-K05
6.	Awareness of the architect's role in society and understanding of the non-technical aspects and the consequences of the architect's/urban planner's activities,-as well as the responsibility for their decisions and their impact on the quality of the environment.	project evaluation review score seminar evaluation review score	project seminar	K2A-K02 K2A-W09 K2A-U07 K2A-U18
7.	Ability to think and act in a creative and resourceful way and to correctly select the most effective design solution to achieve the intended design goal.	project evaluation review score	project	K2A-K12 K2A-U09 K2A-U10

18. Teaching modes and hours
Lecture / BA /MA Seminar / Class / Project / Laboratory

Lecture	Class	Laboratory	Project	BA/MA Seminar
15			90	5

19. Syllabus description:

Course content: (separately for each form of taught classes L./P./Sem.)

Lectures transmit the knowledge of theories, principles and methodologies for designing complex, composite structures of public facility buildings including a typological and conceptual approach. They cover the following topics:

0. Introduction to Architectural Design Studio
1. About Architecture ... part 1
2. About Architecture ... part 2
3. Architecture for culture in public utility complexes
4. Architecture for education in public utility complexes
5. Architecture of concert halls
6. Architecture of Movie Theatre
7. Copernicus Science Centre part 1
8. Copernicus Science Centre part 2
9. Gastronomic establishments
10. High and high-rise buildings
11. Hotel design
12. Sport hall design
13. Design of banks – Structure and typology of bank buildings
14. Design of banks – Structure of regional branches
15. Swimming pool design

Design

Implementation of the design concept for a mixed-use public building complexes based on the principles of design understood as a draft of functional and spatial systems according to criteria dependent on the assumed design goals, developed from the student's own analyses and decisions, which include: location context, thematic block, functional and spatial solutions, using:



– typological approach in module A

– conceptual approach in module B

Identification of a design problem in the form of a concept resulting from a crystallization of an architectural idea with the help of appropriate graphic notation.

Optional topics for the design task

1] Thematic blocks to choose / optional:

- **culture and entertainment:** multiplex, concert hall, musical theater, exhibition halls, arts and cultural venues;
- **services and education:** business and office center, educational center, city promotion center, clubhouse, public meeting center, bank headquarters, trade and services, hotel, gastronomy, entertainment center;
- **sport and recreation:** sports swimming pool, Aquapark, multi-purpose leisure park, sports facilities;

Location: Gliwice, Zabrze

2] Architectural competition - approved by the lecturer, for example

eVolo Magazine 2018 <http://www.evolo.us/competition/>

Seminar

The content of seminars is related to the topic of the student's exercise in the design. The aim of the seminar is to improve the environmental efficiency of adopted design solutions. The confrontation of architectural intentions with possible technical solutions takes the form of a discussion, which is conducted in the context of sustainable development requirements.

The tool – analytical diagram

20. Examination: yes

21. Primary sources:

1. Celadyn W., Kuc S. – Problemy projektowe w kontekście nowych technologii budowlanych, Czasopismo Techniczne PK, zeszyt 18, 8-A/2010, Kraków 2010 r.
2. Czarnecki J. - "Projektowanie obiektów bankowych", Gliwice 2005.
3. Foqué R. – Building Knowledge in Architecture, UPA, Brussels 2010.
4. Jackiewicz W. - "Architektura nie tylko teatru", Ossolineum 1984 r.
5. Koolhaas R., Mau B., Werlemann H. - S M L XL, Monacelli Press, 1995
6. Kwok A.G., Grondzik W.T. – The Green Studio Handbook. Environmental Strategies for Schematic Design. Architectural Press, Oxford 2011.
7. Leupen B., Grafe C., Kornig N., Lampe M. - Projektowanie architektury w ujęciu analitycznym
8. Majerska-Pałubicka B.- Rozwiązania energooszczędne w architektonicznym projektowaniu obiektów handlowych, Wyd. Pol. Śl, Gliwice 2001 r.
9. Majerska-Pałubicka B. – Zintegrowane projektowanie architektoniczne w kontekście zrównoważonego rozwoju. Doskonalenie procesu, Wyd. Pol. Śl, Gliwice 2014 r.
10. Misiągiewicz M. – O prezentacji idei architektonicznej. Monografia, Wyd. PK, Kraków 1999 r.
11. Neufert E. - "Podręcznik projektowania architektoniczno-budowlanego". Arkady 1980 r.
12. Norbert-Schulz Ch. - Bycie, przestrzeń, architektura, Wyd. Murator, Warszawa 2000 r.
13. Pawłowski Z., Cała I. - Budynki wysokie, Oficyna Wydawnicza Politechniki Warszawskiej 2006
14. Sadowski I. - Akustyka w urbanistyce, architekturze i budownictwie, Arkady, Warszawa 1971 r. .
15. Seonwook K. - Architectural and Program Diagrams 1 (Construction and Design Manual) 2012
16. Seonwook K. - Architectural and Program Diagrams 2 (Construction and Design Manual) 2013



17. Wejchert K. - Elementy kompozycji urbanistycznej, Arkady, Warszawa
18. Wines J. – Zielona Architektura, Taschen Verlag GmbH, Kolonia 2008 R.
19. Rozporządzenie w sprawie warunków technicznych jakim powinny odpowiadać budynki i ich usytuowanie.
20. Rozporządzenie w sprawie obiektów hotelarskich i innych obiektów, w których są świadczone usługi hotelarskie
21. <https://uli.org/event/advanced-real-estate-development-mixed-use-and-multi-use/>

22. Secondary sources: Tschumi Bernard: Event-Cities 4, Concept-Form, The MIT Press, 2010; Jodidio P. – Architecture Now; series: Taschen 2004-2010; magazines and periodicals: eg. Architektura i Biznes, Architektura murator , Zawód Architekt, Detail and others

23. Total workload required to achieve learning outcomes

Lp.	Teaching mode :	Contact hours / Student workload hours
1	Lecture	15/ 10
2	Classes	/
3	Laboratory	/
4	Project	90/100
5	BA/ MA Seminar	5/10
6	Other	55/15
	Total number of hours	165/135

24. Total hours: 300

25. Number of ECTS credits: 10

26. Number of ECTS credits allocated for contact hours: 5

27. Number of ECTS credits allocated for in-practice hours (laboratory classes, projects): 4

28. Comments:

Approved:


 (date, Instructor's signature)

27.09.2018


 (date, the Director of the Faculty Unit signature)

27.09.2018