COURSE DESCRIPTION

1. Course title: ARCHITECTURAL DESIGN – INDUSTRY MODULE 2	**2. Course code:** RAr-A-SSII-II-AD-I
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: 2	
10. Faculty teaching the course: Faculty of Architecture, Department of Theory, Design and History of Architecture	
11. Course instructor: Adam Gil PhD Eng. Arch.	
12. Course classification: major	
13. Course status: compulsory	
14. Language of instruction: English	
15. Pre-requisite qualifications: finished the 1st degree of architectural studies, known rules of architectural design, urban design, polish building code (law), basics of urban planning	
16. Course objectives: 1. Gaining ability to use the principles of urban and architectural design in the field of industrial buildings, science (laboratory and academic) buildings, buildings of technological innovation. 2. Mastering the ability to design large architectural functional and spatial structures	
17. Description of learning outcomes:	

Nr	Learning outcomes description	Method of assessment	Teaching methods	Learning outcomes reference code
1	Knowledge of theory and advanced principles of architectural and urban design. Knowledge of history and theory of architecture, urban planning theory, fine arts, technical sciences and arts (in the scope necessary to create projects architectural and urban planning)	written exam, review of hitherto effects, enclosed exercise, discussion, passing the subject	Lectures, Project exercises,	K2A-W01 K2A_W4
2	Knowledge of construction law as well as technical and construction regulations. Understanding of the character and	written exam, review of hitherto effects, enclosed exercise, discussion, passing the subject	Lectures, Project exercises	K2A-W03 K2A-W09

	specificity of the profession of an architect. Basic knowledge of managing an economic activity in the field of design.			
3	Understanding of interdisciplinary determinants of development planning (the industry and in the architectural design of architectural facilities). Knowledge necessary to understand social, legal and other extra-technical factors of an engineering activity and to consider them in an engineering practice.	written exam, review of hitherto effects, enclosed exercise, discussion, passing the subject	Lectures, Project exercises	K2A-W07 K2A-W08
4	Ability to prepare and develop a conception of a facility with a complex function together with the surroundings, meeting both aesthetic and technical requirements, including principles of sustainable development and facilities for the disabled. Ability to consider construction, building and engineering factors in a design. Ability to use skills in the field of fine arts, artistic techniques and computer assistance of design works to create and present projects.	written exam, review of hitherto effects, enclosed exercise, discussion, passing the subject	Lectures, Project exercises, Seminar	K2A-U01 K2A-U03 K2A-U10
5	Ability to define priorities, identify and solve dilemmas connected with carrying out a given task.. Awareness of the role of an architect in society, understanding of extra-technical aspects and effects of the activity of an architect/urban planner and connected with it responsibility for taken decisions and their influence on the environment quality.	written exam, review of hitherto effects, enclosed exercise, discussion, passing the subject	Lectures, Project exercises	K2A-K01 K2A-K02

18. **Teaching modes and hours**
Lecture 15 / BA /MA Seminar 5 / Class / Project 90 / Laboratory

19. Syllabus description:

Lectures:

The tradition of contemporary spatial solutions of industry, the outline of trends in the development of spatial layouts of industry, the relationship between urbanization and the evolution of industrialization, modern groupings

of production and science, shaping science and teaching objects, organization and management objects, spatial teams of higher schools, shaping the architecture of an industrial facility, examples.

Seminar: Discussion on the development of the modern facilities of jobs on the basis of presentations prepared by students.

Project exercises: classes take place in groups of 10 - 15 people, topics are related to the development of a conceptual design of architectural solutions, construction concept, and a spatial development plan. In the semester there are two reviews, combined with a presentation of public discussion in the room. Classes traditionally begin with the enclosed exercise, the second exercise takes place during the review (review No. 2). In justified cases, the absence is justified: on one review and two absences on the exercises. Students have the opportunity to make up for absence and project backlog during consultations.
The subjects of the exercises are different and are subject to changes every year, the principle is respected: that the size / volume of the designed objects should be comparable. The size of designed building is between. 5 and 8 thousand square meters, and the scope of the program includes objects and spaces with both small scale (ie. office) spaces and a large scalar space (ie. production hall). Currently, the following topics are applicable: Regional Printing with the Publishing House, TV Assembly Plant. Institute of Molecular Physics, Exhibition hall, A Regional Airport, An Education and Exhibition Center (Science Museum), An Faculty Building Of A University. Programs of individual tasks were created as part of cooperation with the cities of the Upper Silesian Agglomeration (Katowice. Ruda Śląska. Dąbrowa Górnicza). Locations and sites are mostly selected in result of the mentioned cooperation. The following elements / drawings are required to finish the project: On 3-4 boards 70x100cm. architectural plans 1:200, 2 sections 1: 200, site plan 1: 500, 1: 1000, 3 realistic visualizations or photos of the physical model (mockup) 1: 400 + model itself. CD containing PDF vector versions of boards.
Additional mockup (working model) of site and its surroundings (in scale 1:1000) will be required on the first review.

20. Examination: Yes

21. Primary sources:

Juzwa N., Gil A., Sulimowska A., Witeczek A. Architecture and urban planning for contemporary industry. Gliwice Wydaw. Silesian University of Technology, 2016

Braun H..Gromling Research and Technology Buildings, 2005, .

Schittich Ch. Building Skins. 2006 ,

22. Secondary sources:

Castells M. End of Millenium. The Information Age .Blackwell 1998,

Drury J Factories, Planning, Design. Modernisation, Arch Press 1981,

Jodidio P. Architecture Now, , Taschen 2004 - 2010. Szparkowski Z., Architecture of a contemporary factory, 1998 (in polish), Niezabitowska E.Architecture and industry. New look. 1997(in polish)

Professional architectural web services / webpages of architectural firms involved in industrial, laboratory and office design).

23. Total workload required to achieve learning outcomes

Lp.	Teaching mode :	Contact hours / Student workload hours
1	Lecture	15/5
2	Classes	/
3	Laboratory	/
4	Project	90/110
5	BA/ MA Seminar	5/10
6	Other	50/15
	Total number of hours	160/140

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

26. Comments: due to the complexity of the spatial and functional structure of the designer buildings and the necessity to take into account the basics of constructional issues, the student's homework is required.

2018.09.05
.....
(date, Instructor's signature)

Approved.
KIEROWNIK KATEDRY
Teorii, Projektowania i Historii Architektury
.....prof. dr hab. inż. arch. Jan Rabiej.....
(date, the Director of the Faculty Unit signature)