

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name				
The Role of the Architect in O	Organizing the Investm	nent Process		
Course				
Field of study			Year/Semester	
Architecture			III/6	
Area of study (specialization)	1		Profile of study	
-			general academic	
Level of study			Course offered in	
First-cycle studies			polish/english	
Form of study			Requirements	
full-time			compulsory	
Number of hours				
Lecture	Laboratory cl	asses	Other (e.g. online)	
30	0			
Tutorials	Projects/sem	inars		
30	0			
Number of credit points				
2				
Lecturers				
Responsible for the course/lecturer:		Respons	Responsible for the course/lecturer:	
dr inż. Agnieszka Dziadosz		dr inż. a	dr inż. arch. Wojciech Skórzewski	
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#### Prerequisites

• Has ordered, theoretically founded knowledge covering the key issues of organizing the investment process

• Has structured knowledge to understand the social, economic, organizational and legal determinants of engineering activities

• Has a basic knowledge of the life cycle of building

• Can make a preliminary analysis of the economic effectiveness of an investment and estimate the labor consumption of engineering activities



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• Is able to skillfully use the possessed knowledge and at the same time obtain it from available bibliographic sources

- Has the ability to apply the learned theory to solve practical tasks
- They are aware of the social and economic aspects of the architect's work

• Is aware of the necessity to broaden his theoretical knowledge so that he can find a justification for its application while practicing his profession. Understands the necessity of lifelong learning

## **Course objective**

The aim of the course is to provide knowledge and shape the ability to solve basic problems of management and organization in the investment process, to gain awareness of the importance of the architect's place in the entire life cycle of the facility, practical knowledge of the sequencing of technological and organizational activities.

## **Course-related learning outcomes**

Knowledge

A.W1. architectural design for the implementation of simple tasks, in particular: simple facilities taking into account the basic needs of users, single- and multi-family housing, service facilities in residential complexes, public facilities in an open landscape or in an urban environment;

A.W2. urban design in the scope of implementation of simple tasks, in particular: small building complexes, local spatial development plans, taking into account local conditions and connections, as well as forecasting transformation processes in the settlement structure of towns and villages;

#### Skills

A.U7. communicate using various techniques and tools in a professional environment appropriate for architectural and urban design;

#### Social competences

A.S2. taking responsibility for shaping the natural environment and cultural landscape, including the preservation of the heritage of the region, country and Europe.

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

Learning outcomes presented above are verified as follows: The lectures end with an examination.

The classes include the development of a cost estimate.

Lecture:

• the results of the final test announced at the beginning of the semester, a single-choice test, one correct answer.

• activity (registered) during classes.



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Classes: Design exercises are assessed on the basis of the final grade consisting of the cost estimate made.

Grading scale: 2,0; 3.0; 3.5; 4.0; 4.5; 5.0

Summative assessment: Lecture: test grade + activity during classes.

Classes: assessment of the prepared exercise and defense.

Grading scale: 2,0; 3.0; 3.5; 4.0; 4.5; 5.0

Obtaining a positive grade for the module depends on the student achieving all the learning outcomes listed in the syllabus.

## Programme content

Lectures include:

The cycle and structure of the investment process. Entities (participants) of the investment process. Their rights and obligations. Legislative environment. FIDIC contract conditions. Pre-investment analyzes, feasibility studies, environmental impact assessment and reports, building permit. Methods of investment implementation: managing the investment process, modern methods of implementing a construction project, legal forms of (company) activity, procedures for awarding contracts for design works and construction services. Architect - manager: an architectural design office as an architect's work tool, an architect in the investment process. Integrated design. BIM. Management functions, rules of organization. Time schedule in construcyion and work method. Planning and coordination of activities: schedules and cyclograms, network methods in planning and control of construction projects. The essence of calculations as a function of time and functions of measures. Network methods in the organization of an architect's work. Risk management.

Classes include:

- presented to students with the principles of costing construction works and databases of standards and prices for costing

- preparing a cost estimate for your own building

## **Teaching methods**

1. Problem lecture: from theoretical basics to the analysis of practical implementation of model (as well as failed) investments; architecture in the context of economic life.

2. Lecture with multimedia presentation, presentation of investment documentation, examples of investment feasibility studies.

3. Presentation and discussion of schedules, network models, calculation of earned value, cost estimation in the life cycle of the building, BIM approach in the investment process.



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4. eLearning Moodle (a system supporting the teaching process and distance learning).

#### Bibliography

Basic

1. A guide to the Project Management Body of Knowledge (PMBOK guide), PMI, 2017.

2.Kapliński O. (red.). Metody i modele badań w inżynierii przedsięwzięć budowlanych. IPPT PAN, W-wa 2007.

3. Żywica R., Meszek W., Żywica A. Organizacja procesu inwestycyjnego. Wyd. Politechniki Poznańskiej, 2002.

4. Tomana A.:BIM. Innowacyjna technologia w budownictwie, PWB Kraków , 2015

#### Additional

1. Połoński M. (red.) Proces inwestycyjny i eksploatacja obiektów budowlanych. Wyd. SGGW, W-wa 2008.

2.Kapliński O., Stefański A. Metody sieciowe w organizacji i planowaniu budowy. Wyd. Politechniki Poznańskiej, 1983.

4. Brad H.: BIM and Construction Management. Wiley, 2015

5. Chatfield C., Johnson T., Microsoft Project 2016. Krok po kroku, APN Promise, 2016.

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2,0
Classes requiring direct contact with the teacher	60	2,0
Student's own work (literature studies, preparation for		
laboratory classes/tutorials, preparation for tests/exam, project		
preparation) <sup>1</sup>		

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