COURSE DESCRIPTION CARD - SYLLABUS

Course name
Project Cost Management [S2Arch2E>ZKI]

Course

Field of study
Architecture

Year/Semester
1/2

Area of study (specialization)
–

Profile of study
general academic

Level of study
second-cycle

Course offered in
English

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

• Has knowledge of construction law, organization and economics of the investment process • Has a basic knowledge of the life cycle of building objects and their systems of technical structure • Can make a preliminary analysis of the economic effectiveness of an investment and estimate the labor consumption of engineering activities • Can use information and communication techniques appropriate to the implementation of tasks typical for design activities related to the performance of independent technical functions in construction. • Can think and act in an entrepreneurial, creative and innovative way • Is aware of the social and humanistic aspects of the architect"s work - a profession of public trust

Course objective

The aim of the course is to introduce students to the issues of cost management in the construction investment process. Presentation of methods of cost planning, their monitoring and settlement. Acquiring the practical ability to prepare a project budget and evaluate the economic effectiveness of an investment

Course-related learning outcomes

Knowledge:
The student is able to:

- perceive systemic and non-technical aspects - economic and legal, in the process of architectural, urban and planning design with a high degree of complexity;
- use appropriately selected advanced computer simulations, analyses and information technologies supporting investment cost management, as well as evaluate the obtained results and their usefulness in design and draw constructive conclusions;
- prepare and present a presentation devoted to the assessment of the cost intensity of the investment using various communication techniques,
- appropriately apply professional and ethical standards and rules and legal regulations in the field of investment cost management
- communicate using various techniques and tools in the professional environment appropriate for architectural and urban design;
- perform a preliminary economic analysis of planned engineering activities;

Skills:
The student is able to:
- perceive systemic and non-technical aspects - economic and legal, in the process of architectural, urban and planning design with a high degree of complexity;
- use appropriately selected advanced computer simulations, analyses and information technologies supporting investment cost management, as well as evaluate the obtained results and their usefulness in design and draw constructive conclusions;
- prepare and present a presentation devoted to the assessment of the cost intensity of the investment using various communication techniques,
- appropriately apply professional and ethical standards and rules and legal regulations in the field of investment cost management
- communicate using various techniques and tools in the professional environment appropriate for architectural and urban design;
- perform a preliminary economic analysis of planned engineering activities;

Social competences:
The student is ready to:
- formulate and convey to the public information and opinions regarding the cost of investment and its impact on the surrounding environment
- make a reliable self-assessment, formulate constructive criticism regarding architectural and urban planning activities.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

LECTURE
Lectures on the subject Investment Cost Management end with a written assessment.
formative assessment:
- activity during classes,
Summary assessment:
- written assessment
- the summary assessment is the arithmetic mean of the grades obtained from the test and activity during classes. To obtain a pass, you need to obtain at least 50% of the points from the test and for activity during classes.
Adopted grading scale: 2.0; 3.0; 3.5; 4.0; 4.5; 5.0
TUTORIALS:
Formative assessment:
- active attendance at classes
- participation in consultations
Summary assessment:
The student prepares two studies:
1. Cost estimate (using the integrated elements technique) for a given object
2. Assessment of financial efficiency for a given investment project
The final grade is the arithmetic mean of the grades obtained from the design studies and activity during classes.
Adopted 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

The lecture covers issues related to financing and economic efficiency of investments in the field of architectural and urban design. During the classes, the student gains knowledge on the valuation of investment costs, planning the life cycle of a building, budget planning and cost accounting.
During the exercises, the student gains practical skills in the above-mentioned scope.

Course topics

Lectures:
1. Methods of assessing the economic efficiency of investment projects. Financing investment activities.
2. Valuation of investment costs at the programming and planning stages.
3. Planning costs in the life cycle of a building
4. Costs of the operating phase of a building with particular emphasis on the costs of renovation works.
5. Planning the budget of a construction investment.
6. Monitoring and settling the costs of construction investments. Basic cost accounting used in construction.
7. Contracts in construction and their impact on costs. Project risk analysis, sensitivity strategies.
The exercises include substantive content:
- assessment of the efficiency of construction investments - examples
- updating cash flows (interest, discounting) principles of efficiency calculation, basic static and dynamic methods - examples
- project budget - example
- determining costs in the life cycle of a construction object - examples
In addition, students prepare two studies:
1. Cost estimate (using the integrated elements technique) for a given object,
2. Assessment of financial efficiency for a given investment project

Teaching methods

1. Problem lectures with the use of multimedia techniques, case study, solving tasks based on practical examples during exercises, didactic discussions.
2. eKursy (a system supporting the teaching process and distance learning).

Bibliography

Basic:
A guide to the Project Management Body of Knowledge (PMBOK guide), PMI, 2017.
Kapliński O. (red.). Metody i modele badań w inżynierii przedsięwzięć budowlanych. IPPT PAN, W-wa 2007.
Ashworth A., Perera S., Cost Studies of Buildings, Taylor&Francis Ltd, 2000.
Kotapski R., Budżetowanie w zarząd

Additional:
Faisal A, Munib A, Critical Success Factors of Construction Project Management, OmniScriptum GmbH & Co. KG 2010.
Potts K., Ankrah N., Construction Cost Management, Taylor&Francis Ltd, 2008.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00