COURSE DESCRIPTION CARD - SYLLABUS

Course name
Integrated management systems [S1Bud1>ZSZ]

Course

Field of study
Civil Engineering

Year/Semester
2/4

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
15

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
15

Number of credit points

2,00

Coordinators

dr inż. Agnieszka Dziadosz

Lecturers

Prerequisites

Knowledge of the structure of the investment process in construction, its basic participants and the basics of cost calculation in construction.

Course objective

KNOWLEDGE: Basic knowledge of the effectiveness of construction investments. Knowledge of the structure of the investment process in construction and the principles of calculating its costs. Knowledge of the rules and static methods of evaluating investment projects. SKILLS: The ability to obtain information from literature and the ability to self-study. Ability to formulate and solve decision problems using analytical methods. SOCIAL COMPETENCES: Awareness of the need to expand knowledge in order to acquire the ability to solve complex decision problems. Awareness of the importance of economic issues in construction against the background of the entire engineering knowledge. Ability to work independently and cooperate in a team on assigned tasks.

Course-related learning outcomes

Knowledge:
The student is able to prepare a preliminary economic analysis of a construction company using appropriate tools

The student is able to assess the economic efficiency of an uncomplicated investment project using several methods and present the conclusions of the analysis clearly

Skills:
The student understands the principles of the financial management of a construction company
The student knows static and selected dynamic methods of assessing the economic efficiency of construction projects and the areas of their practical applications

Social competences:
The student is able to formulate and present the result of an independent economic analysis
The student acquires the ability to work in a team
The student is aware of the importance of knowledge about the basic economic tools in professional activity in construction

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures: written exam at the beginning of the semester, pass positive with 60% positive answers.
Exercises: development and individual defense of the completed project

Programme content

Lecture: Specifics of a construction company and a construction project, including the impact of the lack of repeatability of a construction investment on the financial analysis. The importance of efficiency as the profitability of a construction investment. Discussion of concepts related to the analysis, including the concept of profitability, efficiency, color, efficiency, break-even point and its interpretation (including a graphical interpretation of the value and quantitative break-even point), profitability of capital, profitability of assets, profitability of sales. Basic static measures used for the initial assessment of an investment project. Capital structure and methods of financing investment projects and their impact on financial results. The use of selected dynamic methods in the assessment of a construction project. Analysis of financial flows and the importance of the selection of basic parameters such as: time horizon and the discount rate. Introduction to creating business plans for new investment projects.
Projects: Introduction to investment effectiveness assessment methods. Preliminary characteristics of selected methods (simple and discounted return period method, NPV method, profitability index method, internal rate of return method, profitability ratio, financial leverage effect). Case study related to the efficiency analysis of a construction investment project.

Course topics

none

Teaching methods

1. Lecture: multimedia presentation, illustrated with examples given on the blackboard
2. Exercises: presentation of the scope of the project illustrated with short examples and implementation of the project given by the teacher - practical exercise

Bibliography

Basic:
1. Samuelson W.F, Marks S. G., Ekonomia menedźerska, PWE, Warszawa 2009
2. Rogowski W., Rachunek efektywnosci inestycji, Oficyna Wolters Kluwer business, Warszawa 2013
2. Duraj J., Podstawy ekonomiki przedsiębiorstwa, PWE, Warszawa 2004
3. Paczuła C., Rachunkowość przedsiębiorstwa budowlano-montażowego, PCB, Warszawa 2001
4. Gawron H., Metody oceny opłacalności inwestycji na rynku nieruchomości, Wyd. UE w Poznaniu, Poznań 2011

Additional:
1. Żywica R., Meszek W., Żywica A., Organizacja procesu inwestycyjnego, Wyd. PP, Poznań 2003
2. Skudlik M., Planowanie i ocena rentowności przedsięwzięcia, Wydawnictwo Helion, Gliwice 2013
3. Jakubczyc J., Metody oceny projektu gospodarczego, PWN, Warszawa 2008

Breakdown of average student's workload

	Hours	ECTS
Total workload	60	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)	30	1,00