Jan Amos Komeński STATE UNIVERSITY OF APPLIED SCIENCES in Leszno

Funded by the European Union

Course syllabus for ERASMUS+ incoming students

Course Title	
Construction Economics	
Academic Teacher	Mikołaj Zgaiński, PhD
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ECTS credits	2
Number of hours	60
Course code	INT-IPB-CE-26
Course description	
The course Construction economics is a subject that deals with the economic aspects of construction activities. It combines knowledge from construction, economics, and management, teaching how to plan, carry out, and evaluate construction investments financially. The main topics include costs in construction, cost estimating, the investment process, and investment financing, economic efficiency of investments, managing a construction company	
Learning outcomes - course content	
1. The concept of cost, distinction between the concepts: expenses, outlays, costs. Construction market, market situation, forms of commissioning works, tender procedure 2. Recording the output data for calculation as an annex to the construction contract, payment for the assigned work, acceptance, and settlement of the works. 3. Types of cost estimation, 4. The structure of the estimated price, costs (direct and indirect), bases of cost estimation (technical, material, financial), types of construction estimates, summary of costs . 5. Economic efficiency of investment (profitability analysis, economic indicators NPV, IRR, payback period). Assessment of investment risk Knowledge	

1. Student knows measurement and surveying rules for work purposes, for cost calculations and preparing cost documentation at all stages of the construction investment process.
2. Student has economic and technical knowledge about cost estimation methods and the standardization of material inputs in construction work

Skills

1. Preparing the bill of quantities – determining the amount of construction work, preparing a cost analysis for atypical works.
2. Using computer software for estimating construction work. Ability to use Internet resources and other sources to find information.
3. Preparing the bid and investor cost estimates, as well as alternative ones.

Competences

1. Ability to work in a team and share knowledge and experience.
2. Student is open to actions considering the economic criteria of construction activities. He is aware of the responsibility for the consequences of a mistake.

Student workload (self-study description)

- Taking part in classes (30 hours)
- Reading assigned literature, scientific articles, and case studies related to contract and negotiations. Reviewing lecture materials and preparing for examinations (15 hours),
- Preparing the project: (15 hours)
  Preparing output data for price calculation, construction contracts, a material and financial schedule and a summary of costs, investment profitability analysis, risk assessment.

Literature

1. Digital marketing as a digital revolution in marketing communication, Iwona Chomiak-Orsa, Konrad Liszczyk, Informatyka Ekonomiczna; 2020, 2 (56), Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław 2020
2. D.Myers Construction Economics, Routledge: Construction Economics- A New Approach.
3. Keith Potts, Nii Ankrah, Routledge: Construction Cost Management – Learning from Case Studies.
4. E.Brigham, J. Houston: Fundamentals of Financial Management, 2012