



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Organization and planning of the building

Course

Field of study

Civil Engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

2/4

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

Number of hours

Lecture

30

Laboratory classes

0

Other (e.g. online)

Tutorials

0

Projects/seminars

30

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

dr inż. Tomasz Thiel

Responsible for the course/lecturer:

second person is allowed

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Wydział Inżynierii Lądowej i Transportu

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Prerequisites

Knowledge: the student knows the basics of general construction, knows the technology of various types of construction process and the technology of realization the construction of buildings. He knows the rules for creating and reading architectural and construction drawings.

Skills: the student is able to divide construction process based on the technology of performing a specific construction stage. He observes the realization of various building structures, with particular emphasis on the machines, devices, equipment and team compositions used, as well as the organization of the construction site development.



Social competences: the student independently completes the knowledge in the field of new and modern technologies of construction works, methods of realization of building objects in various technologies. He can describe these technologies and methods of realization of objects

Course objective

Learning the basics of organization and motivation. Getting to know the methods of organization and planning of construction works on the basis of examples of general and communication construction facilities. Acquiring the ability to plan the course of construction works in time and analysis of the resources needed to carry out these works. Ability to implement the concept of the construction site development. Learning about the possibilities of using a computer program for planning construction process and construction projects.

Course-related learning outcomes

Knowledge

The student knows the basics of the theory of organization and motivation in relation to construction.

He knows the methods of organization and planning of construction process resulting from the adopted technology of realization, the type of facility, conditions of execution.

He knows the elements and rules of preparing a construction site development plan

Skills

The student is able to identify the works, that are occurred at the stage of earthworks, foundation and assembly works, related to the realization of a selected building object. He is able too to select the composition of working teams of construction process

The student is able to build an organizational network model, make a general schedule of works and conduct an analysis of the resources, which is necessary to achieve a construction process

Social competences

The student is able to cooperate with a technologist, cost estimator, investor, construction works contractors at the stage planning the realization of investment.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures: written colloquium, consisting of two parts. Part 1 is designed to test the student's knowledge and consists of 6 questions. Part 2 is to test the student's skills and is consisted of solving 1 content problem.

Ex. design: presentation and defense of the completed study, including technology, organization and planning of works in time.

Programme content

Basics of organization and motivation in construction. The specificity of the realization of construction objects. Methods and ways of organizing construction process. Determining the duration of construction



processes. Schedules- their types and purpose, rules of preparation, compositions. Network methods in the organization and planning of construction works and construction of specific facilities. Analysis of the resources. Development of the construction site. Construction organizational structures.

Teaching methods

Information lecture with a multimedia presentation

Design exercise - design method

Bibliography

Basic

1. Podstawy teorii organizacji i zarządzania, Bielski M., wyd. 2 rozszerzone, C.H. Beck, W-wa, 2004
2. Organizacja produkcji budowlanej, Rowiński L., Arkady, Warszawa, 1982
3. Technologia i organizacja budowy, Dyżewski A., Arkady, Warszawa, 1990
4. Metody sieciowe w budownictwie, Biernacki J., Cyunel B., Arkady, Warszawa, 1989
5. Podstawy organizacji budowy, Jaworski K.M., Wydawnictwo Naukowe PWN, Warszawa, 2004
6. Zarządzanie w procesie inwestycyjnym, Werner W.A., Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa, 2008

Additional

1. Elementy organizacji robót inżynierskich, Pisarska E., Połoński M., Wyd. SGGW, Warszawa, 2000
2. Podstawy organizacji robót drogowych, Biruk S., Jaworski K. M., Tokarski Z., PWN, Warszawa, 2007
3. Organizacja i planowanie budowy, Lenkiewicz W. PWN, Warszawa, 1985
4. Podstawy zarządzania organizacjami, Griffin R.W., PWN, W-wa, wyd. 1999

Breakdown of average student's workload

| | Hours | ECTS |
|---|-------|------|
| Total workload | 105 | 4,0 |
| 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) ¹ | 45 | 2,0 |

¹ delete or add other activities as appropriate