



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Introduction to project with industry [S2Bud1E-IPB>WdPzP]

### Course

Field of study

Civil Engineering

Year/Semester

1/1

Area of study (specialization)

Construction Engineering and Management

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

60

Laboratory classes

0

Other

0

Tutorials

30

Projects/seminars

15

### Number of credit points

6,00

### Coordinators

dr hab. inż. Jerzy Paślawski prof. PP  
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### Lecturers

### Prerequisites

Basic computer skills, Basic knowledge of research procedures, Basic knowledge of the specifics of scientific research. Ability to communicate in different languages, ability to work with a computer and with research equipment. Awareness of continuous learning, the ability to work in a group and to assume various social roles.

### Course objective

To familiarize students with the possibilities of conducting scientific research as part of their master's thesis in connection with cooperation with external companies. Presentation of construction methods for various elements such as: walls, ceilings, roof truss etc.

### Course-related learning outcomes

Knowledge:

Knows the quality management procedures for construction projects. Has knowledge about the efficiency, costs and duration of construction projects in conditions of risk and uncertainty.

Knows the rules for the production of building materials and products.

Has knowledge about running a business in construction. Understands the principles of financial

management of enterprises.

#### Skills:

Is able to draw up a construction work schedule and cost estimate, contract or business plan for a construction project, manage, manage construction processes, designate responsibilities and tasks of investor and building supervision.

Is able to carry out a threat analysis in the implementation of projects and the operation of buildings and implement appropriate security measures and principles. Is able to develop labor norms and norms as well as quality management procedures.

Is able to prepare studies preparing him for undertaking scientific work.

#### Social competences:

Independently complements and broadens knowledge in the field of modern processes and technologies in construction.

Understands the need to provide the public with knowledge about construction.

Understand that it is necessary to protect the intellectual property, are ready to obey the principles of professional ethics and to take care of the achievements and traditions of the engineer's profession.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Final test from seminars.

Checking quiz on exercises.

Submission of the project developed as part of the project exercises.

### Programme content

Lecture 1 - Introduction

Lecture 2-29 - Meeting with a cooperating construction company (lecture / trip)

Lecture 30 - Credit

Exercises 1 - Introduction

Exercises 2 - Discussion of the possibilities of cooperation with a construction company (I)

Exercises 3 - Discussion of the possibilities of cooperation with a construction company (II)

Exercises 4 - Discussion of the possibilities of cooperation with a construction company (III)

Exercises 5 - Discussion of the possibilities of cooperation with a construction company (IV)

Exercises 6 - Summary (I)

Exercises 7 - Summary (II)

Exercises 8 - Credit

Project 1 - Introduction

Project 2 - Overview of the project I.

Project 3 - Overview of the project II

Project 4 - Overview of the project III

Project 5 - Consultation I.

Project 6 - Consultation II

Project 7 - Consultation III

Project 8 - Credit

### Course topics

none

### Teaching methods

lecture / problem lecture / seminar lecture / lecture with multimedia presentation / story

Exercises / exercise method based on the use of various sources of knowledge (film, photographs, archival materials, source texts, documents, statistical yearbooks, maps, Internet, etc.) / project method / case study (example study) / classical problem method

project-laboratories / project method (research, implementation, practical project) / simulation games / group work / critical event analysis / case analysis / discussion / solving laboratory tasks / performing experiments / designing experiments / observation / measurement

## Bibliography

### Basic

1. Urbanek Grzegorz, Kompetencje a wartość przedsiębiorstwa
2. Roy Rob Timber Framing for the Rest of Us ISBN 9780865715080
3. Barriers in running construction SME case study on introduction of agile methodology to electrical subcontractor P Nowotarski, J Paslawski

### Additional

## Breakdown of average student's workload

	Hours	ECTS
Total workload	150	6,00
Classes requiring direct contact with the teacher	107	4,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	43	1,50