COURSE DESCRIPTION CARD - SYLLABUS

Course name
Enterprise management [S2Bud1E-IPB>ZP2]

Course

Field of study
Civil Engineering

Year/Semester
1/2

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
15

Laboratory classes
15

Other
0

Tutorials
0

Projects/seminars
15

Number of credit points

3,00

Coordinators

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Lecturers

Prerequisites

The student has basic knowledge of the basics of construction; The student is able to obtain information from the indicated sources and analyze engineering activities undertaken; The student is aware of the need to constantly update and supplement construction knowledge and take responsibility in professional work; The student is aware of the issues of management in construction

Course objective

Learning and expanding knowledge of the basic principles of construction, management in construction in the aspect of implementation of a construction project. Sensitizing the student to practical aspects of construction management

Course-related learning outcomes

Knowledge:
Have detailed knowledge of the impact of building investments on the environment and understand the need to implement the rules of sustainable development.
Have detailed knowledge in the field of operation algorithms of selected software supporting the analysis and design of building facilities, which are also useful to plan and manage construction projects,

including Building Information Modelling (BIM).
Know in detail the rules of developing the procedures of construction project quality management; have knowledge of the effectiveness, costs and timing of construction projects under risk and uncertainty conditions.

Skills:
Utilizing the obtained knowledge, they can select appropriate (analytical, numerical, simulation, experimental) methods and tools to solve technical problems.
Applying scientific rules and skills, are able to formulate and test hypotheses related to simple research problems, in order to solve engineering, technological and organisational problems in construction engineering; can prepare studies preparing for research work.
Can estimate hazards of building projects and building operation, implement suitable safety rules and prepare work standards as well as quality management procedures..

Social competences:
Can realise that it is necessary to improve professional and personal competence; are ready to critically evaluate the knowledge and received content..
Understand the need to transfer to the society the knowledge about building engineering, transfer the knowledge in a clear and easily comprehensible manner.
Are ready to think and act in a business-like way.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
As a form of measuring / assessing student work, a final test is carried out (during the last class)
Grade scale determined% from:
90 very good (A)
85 good plus (B)
75 good (C)
65 sufficient plus (D)
55 satisfactory (E)
below 54 insufficient (F)

Programme content

Lecture 1 - Introduction
Lecture 2 -Engineering Enterpreneurship
Lecture 3 - New Concept Ideation
Lecture 4 - Creative techniques
Lecture 5 - New product development
Lecture 6 - Operations Management
Lecture 7 - Quality Management
Lecture 8 - Credit
Laboratories 1 - Introduction
Laboratories 2 - Simulation game
Laboratories 3 - Simulation game II
Laboratories 4 - Simulation game III
Laboratories 5 - Simulation game IV
Laboratories 6 - Simulation game - summary
Laboratories 7 - Simulation game - overview
Laboratories 8 - Credit
Project 1 - Introduction
Project 2 - Project overview
Project 3 - Project overview II
Project 4 - Project overview III
Project 5 - Consultation
Project 6 - Consultation II
Project 7 - Consultations III
Project 8 - Credit

Course topics

none

Teaching methods

Pyramid discussion; Panel discussion; The classic problem method; Teaching games; Exchange of ideas; Informative lecture; Problem lecture; Conversational lecture; Program text; Work with a book; Talk; Lecture reading; Demonstration method; Laboratory method; Production exercise method; Method of experiments; Observation and measurement method; Project method; Leading text method; Workshop method; Show.

Bibliography

Basic
1. Davis T. R. How to open and operate a financially successful construction company, Atlantic Publishing, Ocala 2007
2. March. Ch. Operations management for construction, Hoboken, NJ : Taylor and Francis, 2009. - 223 p.
3. Kirk R. W. Running a 21st-century small business: The Owner's Guide to Starting and Growing Your Company, Warner Books, NY 2006
Additional
1. Barriers in running construction SME?case study on introduction of agile methodology to electrical subcontractor P Nowotarski, J Paslawskii

Breakdown of average student's workload

	Hours	ECTS
Total workload	90	3,00
Classes requiring direct contact with the teacher	45	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	45	1,50