COURSE DESCRIPTION CARD - SYLLABUS

Course name
Weak places in buildings [S2Bud1-IPB>SMwB]

Course

Field of study
Civil Engineering

Year/Semester
2/3

Area of study (specialization)
Construction Engineering and Management

Profile of study
general academic

Level of study
second-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

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Lecturers

Prerequisites

Basic knowledge of general construction, building mechanics, building physics.

Course objective

Provision of maximum knowledge on the diagnosis and repair of selected structures

Course-related learning outcomes

Knowledge
The student knows the principles of building diagnostics
The student knows and applies the provisions of the construction law.
The student has knowledge of the work and causes of the destruction of building structures
Skills
The student is able to select materials and repair technologies. The student knows the methods and diagnostic procedures. He can make an expert opinion or technical opinion.
Social competences
Awareness of the need to constantly update and supplement construction knowledge and engineering skills. The student is responsible for the reliability of the results of their work and the evaluation of the work

of the team subordinate to him. The student understands the need to provide the society with knowledge about construction.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Within the subject, classes are conducted as: lectures and projects
as a form of measurement / evaluation of the student's work, the following are carried out:
Lectures:
* final tests
Rating scale specified% from:
90 very good (A)
80 good plus (B)
70 good (C)
60 sufficient plus (D)
50 sufficient (E)
below 50 insufficient (F)
In doubtful cases, the credit is extended to the oral part.
Auditorium projects:
Defense of projects.

Programme content

Diagnostics, moisture, thermal insulation-repairs, cracks and scratches in building structures

Course topics

Construction diagnostics
Definition of studies / examples
Mycological problems - diagnosis
Problems of masonry structures - diagnostics
Problems of truss structures - diagnostics
Humidity problems/protection methods

Teaching methods

Lecture / problem lecture / lectures with multimedia presentation
Projects: involving the use of professional literature, standards, Acts -
preparation of an expert opinion of the building enriched with photographic documentation with a multimedia presentation

Bibliography

B.Ksit Diagnostyka wilgotnościowa obiektów budowalnych . Metodyka procedury badań. 2023wydawnictwo PP
L.Rudziński : Konstrukcje Murowane. Remonty i Wzmocnienia.Politechnika świetokrzyska Kielce 2010
L.Runkiewicz:Diagnostyka obiektów budowlanych. PWN 2020

B.Ksit,B.Monczyński: Zabezpierczenie elementów budynku znajdujących się w gruncie. Izolacje przeciwwilgociowe i przeciwwodne. Verlag Daschofer sp.z o.o.2011
B.Ksit,B.Monczyński: Izolacje przeciwwilgociowe i przeciwwodne dachów płaskich i tarasów. Verlag Daschofer sp.z o.o.2012

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