COURSE DESCRIPTION CARD - SYLLABUS

Course name
Preparation of the diploma thesis with elements of scientific research [N1Bud1>PPDzEBN]

Course

Field of study
Civil Engineering

Year/Semester
5/9

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
5

Projects/seminars
0

Number of credit points

15,00

Coordinators

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Lecturers

Prerequisites

basic knowledge (at the engineering level) on the strength of materials and building mechanics, basics of construction, metal, reinforced concrete, masonry, wooden / communication constructions (bridges, roads, railways)

Course objective

acquiring practical skills in the field of construction, dimensioning and preparation of partial construction documentation of a simple building structure

Course-related learning outcomes

Knowledge:
a) has advanced knowledge of the principles of descriptive geometry and technical drawing, recording and reading architectural drawings, construction maps and geodetic maps, as well as the methods of preparing the maps both traditionally and using the Building Information Modelling (BIM) technology.

b) knows building legislation, Polish standards (PN) and European standards (EN), technical conditions of constructing building facilities, as well as basic ideas and rules in the field of intellectual and industrial property protection.
c) has advanced knowledge of building materials and their properties, research methods, basic elements of design as well as performance and assembly technologies (including environment-friendly materials).
d) knows the rules of constructing and analysing civil engineering, low-energy, passive, sustainable, industrial, road, bridge, and railroad transport units.

Skills:
a) is able to gather information from literature, databases and other properly selected information sources; can synthesize the obtained information, interpret and evaluate it, as well as draw conclusions, formulate, discuss and justify opinions and positions.
b) is able to read and interpret architectural, building, installation and geodetic drawings, prepare graphic documentation in a traditional way and using selected CAD software (including the BIM technology).
c) can apply the building law regulations and legal documents concerning building facilities
d) can evaluate the technical condition of building facilities and indicate appropriate methods for their maintenance.

Social competences:
a) is able to work autonomously and cooperate in a team on a designated task
b) is responsible for the accuracy of the results obtained and the interpretation of the results of his work
c) is able to sacquire and expand his knowledge on modern processes and technologies on his own

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
assessment of the diploma thesis presented

Programme content

implementation of the thesis, taking into account scientific aspects

Course topics

compatible with the given topic of the thesis

Teaching methods

discuss with the Student about current problems, clarify on an ongoing basis or provide sources in the literature on the subject to solve problems

Bibliography

Basic
scientific and technical literature necessary to prepare the thesis
technical standards and normatives
building law
Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	375	15,00
Classes requiring direct contact with the teacher	5	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	370	4,50