



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma thesis with elements of scientific research [S2Bud1E-ZBZ>PDzEBN]

Course

Field of study

Civil Engineering

Year/Semester

2/3

Area of study (specialization)

Sustainable construction 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

0

Laboratory classes

0

Other

0

Tutorials

10

Projects/seminars

0

Number of credit points

15,00

Coordinators

dr hab. inż. Jerzy Paślawski prof. PP
jerzy.paslowski@put.poznan.pl

Lecturers

Prerequisites

Knowledge and skills acquired during second-cycle studies in Civil Engineering, particularly within the Construction Engineering and Management specialisation. Ability to work independently on assigned tasks.

Course objective

To prepare the student for independent or team-based development of a master's thesis, including elements of scientific research.

Course-related learning outcomes

Knowledge:

Has knowledge of regulations concerning intellectual property protection and copyright law.

Skills:

- Is able to formulate and test hypotheses related to research problems using scientific methods and prepare studies leading to solutions of engineering, technological, and organisational problems in construction.

- Is able to acquire information from literature, databases, and other relevant sources, integrate and

critically evaluate it, and formulate and justify conclusions and opinions.

- Is able to plan and organise lifelong learning independently and guide others in this process, as well as communicate specialist knowledge in civil engineering to diverse audiences and participate in professional discussions.
- Is able to lead a team, cooperate with others, and take a leading role in group work.

Social competences:

- Is responsible for the reliability of obtained results.
- Is responsible for ensuring safety in individual and team work.
- Is ready to independently develop and expand knowledge in modern construction processes and technologies.
- Understands the importance of copyright protection and is committed to professional ethics and the development of the civil engineering profession.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Regular consultations assessing the substantive quality and progress of the master's thesis.

The final grade is assigned by the thesis supervisor.

Grading scale:

90-100% - very good (A)

80-89% - good plus (B)

70-79% - good (C)

60-69% - satisfactory plus (D)

50-59% - satisfactory (E)

below 50% - fail (F)

Programme content

The course is based on regular consultations with the thesis supervisor regarding the progress of the master's thesis.

Course topics

Issues related to the preparation of a master's thesis including elements of scientific research in civil engineering, with particular emphasis on sustainable construction. Definition of research objectives, scope, and methodology. Analysis of scientific and technical literature related to the selected research problem. Development of research or engineering concepts and preparation of a thesis plan. Execution of research, analyses, or design studies. Interpretation of results and preparation of the final thesis. Preparation and presentation of research outcomes and discussion of their relevance to contemporary construction challenges.

Teaching methods

individual consultations with the thesis supervisor

Bibliography

Basic:

Scientific and technical literature, standards, guidelines, and technical requirements relevant to the selected thesis topic.

Additional:

Detailed procedures, recommendations, and standards depending on the selected research topic.

Breakdown of average student's workload

	Hours	ECTS
Total workload	375	15,00
Classes requiring direct contact with the teacher	10	5,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	365	10,00