# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name Diploma seminar [S2Bud1-BDMiK>SD]

Course			
Field of study Civil Engineering		Year/Semester 2/3	
Area of study (specialization) Road, Bridge and Railway Engined	ering	Profile of study general academic	>
Level of study second-cycle		Course offered in polish	
Form of study full-time		Requirements compulsory	
Number of hours			
Lecture 0	Laboratory classe 0	es	Other (e.g. online) 0
Tutorials 15	Projects/seminar 0	S	
Number of credit points 4,00			
Coordinators		Lecturers	
dr hab. inż. Mieczysław Słowik pro mieczyslaw.slowik@put.poznan.p	of. PP I		

#### **Prerequisites**

1. Knowledge: - has the knowledge needed to formulate a technical problem in the field of road, bridge and railway engineering and search for its solution - knows the general requirements for master"s theses 2 Skills: - can formulate a technical problem related to the thesis and find methods of its solution - can prove the theses formulated by himself/herself - can make a critical assessment of the problem and the methods of solving it 3 Social competences: - understands the need for lifelong education - is aware of the importance of the effects of engineering activities and responsibility for decisions made - acts in accordance with the rules of ethics

#### **Course objective**

Summarizing and extending the knowledge gained during the second cycle studies. Developing the ability to publicly deliver a presentation on a given topic. Acquainting with the requirements related to taking the diploma examination, preparation of the master"s thesis and its defense.

#### Course-related learning outcomes

Knowledge:

1. Knows the regulations in the field of industrial property protection and copyright.

Skills:

1. Is able, in accordance with scientific principles, using a scientific workshop, to formulate and test hypotheses related to simple research problems, leading to the solution of engineering, technological and organizational problems appearing in road, bridge and railway construction; is able to prepare studies preparing for undertaking scientific work.

2. Can obtain information from literature, databases and other properly selected sources; is able to integrate the obtained information, make its creative interpretation and evaluation, as well as draw conclusions, formulate and justify opinions and present them.

3. Can independently plan and implement their own lifelong learning and direct others in this area, and use her/his knowledge in the field of construction engineering in order to communicate on specialist topics with diverse audiences, discuss and debate important issues in the construction industry.

Social competences:

Is responsible for the reliability of the obtained results of his work and the work of her/his team.
Is ready to independently supplement and expand knowledge in the field of modern processes and technologies used in road, bridge and railway engineering.

3. Is aware of the need to improve professional and personal competences, is ready to critically evaluate the knowledge and content received.

4. Understands the need to provide the society with knowledge about construction engineering, passes this knowledge on in a commonly understood manner.

5. Understands the need to protect copyrights and is ready to observe and develop the principles of professional ethics, as well as care for the development of the achievements of the profession of civil engineer and maintain the ethos of the 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: Assessment of the prepared and delivered presentations and student activity during the seminar classes.

## Programme content

Acquainting students with the formal rules of taking the diploma examination (dates, conditions).

Requirements for the preparing and editing of the master"s thesis, form, scope, work layout and time frame. Literature studies as an important element of the master"s thesis.

Formulating theses and purpose of the work.

Results analysis, discussion.

Formulating conclusions.

Methodology of scientific work.

Discussion of the techniques of presenting the thesis.

Presentation by students of the main theses of their master"s thesis with a discussion.

Presentation by students of major scientific and technical publications related to the subject of their master"s thesis.

### **Teaching methods**

Multimedia presentations prepared by the lecturer and students. Discussion concerning the presentations.

### Bibliography

Basic

1. Dembecka W., Metodyka studiowania w uczelni technicznej, Wyd. Pol. Poznańskiej Poznań 1994.

2. Szkutnik Z., Metodyka pisania pracy dyplomowej. Skrypt dla studentów, Poznań 2005

3. Kozłowski R., Praktyczny sposób pisania prac dyplomowych z wykorzystaniem programu komputerowego i Internetu, Warszawa 2009

4. Regulamin studiów 1. i 2.stopnia oraz jednolitych magisterskich uchwalony przez Senat Akademicki PP Uchwałą Nr 154/2016-2020 z 24.04.2019

5. USTAWA z dnia 20 lipca 2018 r. Prawo o szkolnictwie wyższym i nauce Additional

 Rajczyk J., Rajczyk M., Respondek Z., Wytyczne do przygotowania prac dyplomowych magisterskich i inżynierskich na Wydziale Budownictwa Politechniki Częstochowskiej, Częstochowa 2004
Bobrowski D., Wybrane metody wnioskowania statystycznego, Wyd. Pol. Poznańskiej Poznań 1988
Opoka E., Uwagi o pisaniu i redagowaniu prac dyplomowych na studiach technicznych., Wydawnictwo Politechniki Śląskiej, Gliwice, 20036. Katalog typowych konstrukcji nawierzchni sztywnych, GDDKiA, Warszawa 2014

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	105	4,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	90	3,50