# POZNAN UNIVERSITY OF TECHNOLOGY



### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Diploma seminar [N1Bud1>SD]

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 classe 0		Other 0
Tutorials 20	Projects/seminars 0	3	
Number of credit points 3,00			
Coordinators dr hab. inż. Wojciech Siekierski wojciech.siekierski@put.poznan.pl		Lecturers	

### **Prerequisites**

knowledge acquired during the entire education process to date, with particular emphasis on the subject of the diploma

# **Course objective**

introducing students to the rules of taking the diploma examination and the rules of preparing and defending the diploma thesis. Familiarizing students with the requirements for the substantive and formal dimension of the diploma thesis; summary and extension of the knowledge and skills acquired during the studies. Introducing students to self-education methods; preparing students for the public presentation of the diploma thesis.

# 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) knows detailed rules of constructing and dimensioning elements and metal connections; concrete, wooden, and brick building facilities.

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 dimension basic structural elements in the units of civil, industrial, road, bridge and railroad building, working individually or as part of a team.

b) is able to design selected elements and simple metal, concrete, wooden and brick constructions, working individually or as part of a team.

c) is able to perform preliminary economic analysis of basic engineering activities; can prepare a simple cost calculation and a work schedule.

d) can apply the building law regulations and legal documents concerning building facilities e) can make plans autonomously and carry out the lifelong learning processes; can apply the obtained knowledge in the field of building engineering in order to communicate with the surroundings using specialized terminology, and discuss important problems of building industry

Social competences:

a) is able to adapt to new and changing circumstances, can define priorities for performing tasks assigned by themselves and by other people, acting in the public interest and with regard to the purposes of sustainable development.

b) takes responsibility for the accuracy and reliability of work results and their interpretation.

c) understands that it is necessary to protect the intellectual property, are ready to obey the principles of professional ethics and to take care of the achievements and traditions of the engineer's profession d) are communicative in multimedia presentations.

e) understand the need to transfer to the society the knowledge about building engineering, transfer the knowledge in a clear and easily comprehensible manner.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows: evaluation of the presented diploma dissertation, evaluation of presentation during the seminar

# **Programme content**

preparation for the thesis

### **Course topics**

basic rules related to the methodology of theses; choosing a topic and defining a research problem; substantive and formal requirements for the preparation of the thesis and preparation for the diploma examination

# **Teaching methods**

auditorium exercises

# Bibliography

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

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	185	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	57	2,00