

FACULTY OF CIVIL ENGINEERING

SUBJECT CARD

Name in English: Seminarium dyplomowe
Name in Polish: Master (MSc) thesis seminar
Main field of study (if applicable): *Civil Engineering*
Specialization (if applicable): Civil Engineering
Level and form of studies: ~~1st~~ / 2nd level*, full-time / ~~part-time~~*
Kind of subject: obligatory / optional / ~~university-wide~~*
Subject code: CEB009863
Group of courses: ~~YES~~ / NO*

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU)					30
Number of hours of total student workload (CNPS)					90
Form of crediting	Examination / crediting with grade *	Examination / crediting with grade *	Examination= / crediting with grade *	Examination / crediting with grade *	Examination / crediting with grade *
For group of courses mark (X) final course					
Number of ECTS points					3
including number of ECTS points for practical (P) classes					2,7
including number of ECTS points for direct teacher-student contact (BK) classes					1,1

* delete as appropriate

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Has basic theoretical knowledge and skills in accordance with the requirements of the field of study *building* of the second cycle program, including specialty Civil Engineering.
2. Can shape, model, analyze, and measure components of complex buildings.
3. Knows the applicable standards, guidelines and regulations of construction, including extended for studying a specialty.
4. Has abilities and computational efficiency in the design of building structures, including the use of advanced computer-aided techniques for the calculation and plotting.

SUBJECT OBJECTIVES

- C1. Synthesis of knowledge from the completed studies and practical experience.
- C2. Creation of education skills to assess the suitability and usability of various tools and sources of information to solve engineering problems.
- C3. Creation of education abilities of independent development and demonstration of technical issues in the construction industry, using multimedia techniques.
- C4. Acquiring ability to develop a master thesis and a critical and comprehensive look at technological solutions.
- C5. Learn how to prepare basic studies of a scientific or technical knowledge.

C6. Developing skills of preparation, critical evaluation and presentation of experimental results and evaluation studies.

SUBJECT EDUCATIONAL EFFECTS

Relating to knowledge:

- PEK_W01 Has in-depth knowledge of issues related to the construction industry, in particular relating to diploma specialization.
- PEK_W02 Has knowledge of the techniques and methods of guiding and participation in public discussion on the issue of the construction industry.

Relating to skills:

- PEK_U01 Has specific skills for solving problems in the construction industry, particularly in specialty Civil Engineering.
- PEK_U02 Has the ability to collect and critically analyze, from a variety of sources, of information about the construction industry, in particular, of the realized diploma specialization.
- PEK_U03 Is able to conduct properly design, implementation and make, using advanced multimedia technology, complex technical presentations in the area of construction, and in particularly of the specialty Civil Engineering.
- PEK_U04 Has the ability, in accordance with scientific principles and using research techniques, to prepare and implement a preliminary work on a research leading to solutions of complex engineering problems that occur in the construction industry.
- PEK_U05 Is able to prepare all the necessary information to present the essence of popular scientific or technical problems.

Relating to social competences:

- PEK_K01 Is able to work independently over the implementation of the forthcoming thesis.
- PEK_K02 Has the ability to prepare and execute complex presentation and the ability to participate in discussions in a public forum on topics related to construction.
- PEK_K03 Is aware of the social role of technical college graduate in defining and delivering to public the information and opinions on the achievements of technology and other aspects of engineering.

PROGRAMME CONTENT

Form of classes - lecture		Number of hours
Lec1		
...		
	Total hours	

Form of classes - class		Number of hours
C11		
...		
	Total hours	

Form of classes - laboratory		Number of hours
Lab1		
...		
	Total hours	

Form of classes - project		Number of hours
Proj1		
...		
	Total hours	

Form of classes - seminar		Number of hours
Sem1	Introduction to the course, range of subject, course organization, the principles of evaluation. Methodology for the design and development of complex multimedia presentations using computer tools. Sources of information and how to collect them and analyze.	2
Sem2	Examples of the use of advanced software features in presentations related to the theme of the course - an analysis of the advantages and disadvantages of discussed presentations. Rules on technical presentation. Formulating questions and answers during the discussion in a public forum.	2
Sem3	Presentation of the principles of preparation and implementation of issues related to the conduct of basic research. Examples.	2
Sem4	Individual multimedia presentations related to the topic of theses (1 st series) and discussion.	2
Sem5	Individual multimedia presentations related to the topic of theses (1 st series) and discussion.	2
Sem6	Individual multimedia presentations related to the topic of theses (1 st series) and discussion.	2
Sem7	Individual multimedia presentations related to the topic of theses (1 st series) and discussion.	2
Sem8	Individual multimedia presentations related to the topic of theses (1 st series) and discussion.	2
Sem9	Summary of the 1st series of presentations. Discussion.	2
Sem10	Individual multimedia presentations related to the topic of theses (2nd series) and discussion.	2
Sem11	Individual multimedia presentations related to the topic of theses (2nd series) and discussion.	2
Sem12	Individual multimedia presentations related to the topic of theses (2nd series) and discussion.	2
Sem13	Individual multimedia presentations related to the topic of theses (2nd series) and discussion.	2
Sem14	Individual multimedia presentations related to the topic of theses (2nd series) and discussion.	2
Sem15	Summary of the results of the seminar and credition.	2
	Total hours	30

TEACHING TOOLS USED	
N1.	Multimedia presentations - own and colleagues.
N2.	Discussion of problems among students.
N3.	Evaluating of presentations - with justification.
N4.	Contact hours

EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT		
Evaluation (F – forming (during semester), P – concluding (at semester end))	Educational effect number	Way of evaluating educational effect achievement
F1 (seminar)	PEK_W01, PEK_W02, PEK_U01, PEK_U02, PEK_U03, PEK_U04, PEK_U05, PEK_K01, PEK_K02, PEK_K03	Multimedia presentations - series 1
F2 (seminar)	PEK_W01, PEK_W02, PEK_U01, PEK_U02, PEK_U03, PEK_U04, PEK_U05, PEK_K01, PEK_K02, PEK_K03	Multimedia presentations - series 2
F3 (technical discussion)	PEK_W01, PEK_U01, PEK_U02, PEK_K02	Activity and the value of the substantive vote in the discussions.
$P = 0,35 \times F1 + 0,35 \times F2 + 0,2 \times F3 + 0,1 \times \text{obecność}$		

PRIMARY AND SECONDARY LITERATURE
<u>PRIMARY LITERATURE:</u> Literature depending on theme in which student is preparing his diploma. <u>SECONDARY LITERATURE:</u> <ol style="list-style-type: none"> 1. Żurek E.: Sztuka prezentacji czyli jak przemawiać obrazem (Płyta CD). Wyd. Poltex, 2008. 2. Grzybowski P., Sawicki K.: Pisanie prac i sztuka ich prezentacji. Wyd. Impuls, 2010. 3. Blein B.: Sztuka prezentacji i wystąpień publicznych. Wyd. RM, 2010. 4. Wiszniewski A.: Jak pisać skutecznie? Wyd. Videograf II, 2003..

SUBJECT SUPERVISOR (NAME AND SURNAME, DIVISION, E-MAIL ADDRESS)
prof. dr hab. inż. Jan Bień, Katedra Mostów i Kolei, jan.bien@pwr.wroc.pl
MEMBERS OF THE EDUCATIONAL TEAM (NAME AND SURNAME, E-MAIL ADDRESS)
prof. dr hab. inż. Jan Bień, jan.bien@pwr.wroc.pl prof. dr hab. inż. Jerzy Jasienko, jerzy.jasienko@pwr.wroc.pl prof. dr hab. inż. Dariusz Łydźba, dariusz.lydzba@pwr.,wroc.pl

MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
Master thesis seminar
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY *Civil Engineering*
AND SPECIALIZATION **Civil Engineering**

Subject educational effect	Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)**	Subject objectives ***	Programme content ***	Teaching tool number ***
Knowledge				
PEK_W01	K2S_CEB_W16-K2S_CEB_W21	C1	Sem4-Sem8, Sem10-Sem14	N1, N2
PEK_W02	K2_W15, K2_U01	C2, C3, C4, C5	Sem4-Sem14	N1, N2, N3
Skills				
PEK_U01	K2S_CEB_U18-K2S_CEB_U23	C2 do C8	Sem4-Sem8, Sem10-Sem14	N1, N2, N3
PEK_U02	K2_U01, K2_K01	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4
PEK_U03	K2_U01	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4
PEK_U04	K2_U15, K2_U16, K2_U17	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4
PEK_U05	K2_U01, K2_U02, K2_K06	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4
Social competence				
PEK_K01	K2_K03	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4
PEK_K02	K2_K06	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4
PEK_K03	K2_U02, K2_K01, K2_K02, K2_K06	C2 do C8	Sem1 do Sem15	N1, N2, N3, N4

** - enter symbols for main-field-of-study/specialization educational effects

*** - from table above