

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Diploma Seminar		Code 1010102131010120109
Field of study Civil Engineering Second-cycle Studies	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Bridges and Underground Engineering	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: - Classes: 2 Laboratory: - Project/seminars: -		No. of credits 7
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 7 100% 7 100%
Responsible for subject / lecturer: dr hab.inż. Arkadiusz Madaj email: arkadiusz.madaj@put.poznan.pl tel. 61 647 5830 Wydział Budownictwa i Inżynierii Środowiska 61-138 Poznań, ul. Piotrowo 5		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Information concerning the durability of materials and construction mechanics, enabling the calculation of section state and internal forces in statistically determined and undetermined constructions, the modeling of engineer structures, the use of influence lines, bridge loads, the forming of a bridge cross-section, the acquaintance of bridge construction systems and the skill to chose them, the design of steel and concrete bridges, the basic knowledge concerning the building technology.
2	Skills	To form and design a bridge of any type. A presentation of chosen constructional solutions in front of the team.
3	Social competencies	The awareness of constant gaining knowledge. The ability to form ideas and communicate among the group. The ability to present ones achievements and justify ideas. The proper use of polish language. Cultural behavior.
Assumptions and objectives of the course: The ability to present a project and defend ones ideas in front of the group.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. The forming of a cross and longitudinal bridge section. - [K_W02] 2. The strength calculation for bridge of any type. - [K_W14] 3. The preparation of design drawings. - [K_W02]		
Skills:		
1. To prepare a bridge project. - [K_U16] 2. To present the project in front of the team. - [K_U07] 3. To justify and defend the established constructional solution. - [K_U07]		
Social competencies:		
1. The awareness of constant supplement of knowledge. - [K_K03] 2. Communication among the group concerning civil engineering. - [K_K07] 3. The ability to justify and defend the established constructional solution. - [K_K02]		

Assessment methods of study outcomes		
The evaluation of presentation of the established solutions and defending them In front of the group.		
Course description		
-Getting to know the rules of preparation of basic data for a bridge project. Bridge forming in terms of the natural and communicational conditions. The preparations of project documentation. The rules of presenting ones task in front of the group.		
Basic bibliography:		
1. Bibliography concerning the subject of master?s degree.		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
Student's workload		
Source of workload	hours	ECTS
Total workload	175	7
Contact hours	50	2
Practical activities	125	5