

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Diploma Seminar</b>		Code <b>1010102131010100109</b>
Field of study <b>Civil Engineering Second-cycle Studies</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>2 / 3</b>
Elective path/specialty <b>Bridges and Underground Engineering</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>Second-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: - Classes: <b>15</b> Laboratory: - Project/seminars: -		No. of credits <b>3</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b>  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		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	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	<b>Skills</b>	To form and design a bridge of any type. A presentation of chosen constructional solutions in front of the team.
3	<b>Social competencies</b>	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.
<b>Assumptions and objectives of the course:</b> The ability to present a project and defend ones ideas in front of the group.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
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]		
<b>Skills:</b>		
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]		
<b>Social competencies:</b>		
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]		
<b>Assessment methods of study outcomes</b>		

The evaluation of presentation of the established solutions and defending them In front of the group.		
<b>Course description</b>		
-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.		
<b>Basic bibliography:</b>		
<b>Additional bibliography:</b>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	175	3
Contact hours	60	1
Practical activities	115	2