

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Preparation of a diploma thesis with elements of scientific research</b>		Code <b>1010101171010118786</b>
Field of study <b>Civil Engineering First-cycle Studies</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>4 / 7</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: - Classes: <b>5</b> Laboratory: - Project/seminars: -		No. of credits <b>15</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. Maciej Szumigala email: maciej.szumigala@put.poznan.pl tel. 061 665 2401 Faculty of Civil and Environmental Engineering ul. Piotrowo 5 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic knowledge (engineering level) of the strength of materials and mechanics of structures, building foundations, metal structures, reinforced concrete, masonry, wood.
2	<b>Skills</b>	The ability to acquire information from identified sources, preparation of project documentation uncomplicated simple objects.
3	<b>Social competencies</b>	Awareness of the need to broaden their skills and making a major responsibility in their future careers.
<b>Assumptions and objectives of the course:</b> Gaining practical skills in designing, dimensioning, and prepare a partial documentation of construction and simple design of a building.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. 1. Knows the standards and guidelines for the design of buildings and their components - [ [K_W06]] 2. 2. Knows the principles of designing and dimensioning of building construction elements - [ [K_W07]] 3. 3. Knows the principles of design and analysis of selected objects of general construction - [ [K_W09]]		
<b>Skills:</b>		
1. 1. Able to assess and make a statement of loads acting on buildings - [ [K_U02]] 2. 2. Able to properly define computational models for computer analysis of the structure - [ [K_U03]] 3. 3. Able to perform static analysis of rod-like structures - [ [K_U04]] 4. 4. Place the dimension the basic building blocks - [ [K_U08]]		
<b>Social competencies:</b>		
1. 1. Able to work independently and collaborate as a team on a designated task - [ [K_K01]] 2. 2. He is responsible for the accuracy of the results of their work and their interpretation - [ [K_K02]] 3. 3. Isolated complements and extends knowledge in the field of modern processes and technologies - [ [K_K03]]		
<b>Assessment methods of study outcomes</b>		

Completion of the course on the basis of: - Assessment presented thesis, - Regularity of its execution, - Ability to solve technical problems.		
<b>Course description</b>		
Consistent with the theme of the thesis Teaching methods. A lively discussion with a graduate on current problems, explanations on a regular basis or providing sources in the subject literature.		
<b>Basic bibliography:</b>		
1. Technical Books in line with the theme of work		
<b>Additional bibliography:</b>		
1. . Polish and European technical standards and construction		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. OWN WORK(Intependent) Preparation of thesis and scientific research	365	
2. Direct contacte/consultation with supervisor	5	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	375	15
Contact hours	10	1
Practical activities	365	14