

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Technology of Building Works</b>		Code <b>1010104141010110494</b>
Field of study <b>Civil Engineering First-cycle Studies</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>2 / 4</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>part-time</b>	
No. of hours Lecture: <b>22</b> Classes: <b>8</b> Laboratory: <b>-</b> Project/seminars: <b>10</b>		No. of credits <b>4</b>
Status of the course in the study program (Basic, major, other) <b>other</b>		(university-wide, from another field) <b>university-wide</b>
Education areas and fields of science and art		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b> dr inż. Paweł Szymański email: pawel.s.szymanski@put.poznan.pl tel. 502 418 900 Faculty of Civil and Environmental Engineering ul. Piotrowo 5 60-965 Poznań		<b>Responsible for subject / lecturer:</b> dr inż. Paweł Szymański email: pawel.s.szymanski@put.poznan.pl tel. 502 418 900 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>	The student has a basic knowledge of technology and building materials.
2	<b>Skills</b>	Able to obtain information from the literature and other sources. It can combine the information obtained.
3	<b>Social competencies</b>	The student should be aware of the consequences of their decisions. Understands the need for learning throughout their working lives. He understands the need for cooperation and teamwork.
<b>Assumptions and objectives of the course:</b> Transfer of knowledge engineering technology works zero state, raw and finishing and suitability of construction materials at the stage of execution.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Knowledge of technology works - [[K_W12, K_W14]] 2. Knowledge of selection of technologies and materials of construction works zero state, raw and finishing - [[K_W12, K_W14]]		
<b>Skills:</b>		
1. The student can choose equipment for construction works - [[K_U20]] 2. The student can choose the technology and materials for the construction works - [[K_U20]] - [[K_U20]]		
<b>Social competencies:</b>		
1. Able to work independently and collaborate as a team on the specific task - [[K_K01]] 2. He is responsible for the accuracy of the results of their work and their interpretation - [[K_K02]] 3. Isolated complements and extends knowledge of modern techniques and technologies - [[K_K03]]		
<b>Assessment methods of study outcomes</b>		

<p>Lectures:          - A written examination          Exercise:          - Test after exercise.          Projects:          - Commitment to and defense of the project</p>	
<b>Course description</b>	
<p>Lectures:          1. Introduction and discussion of the principles of technology works          2. Technology earthmoving          3. Concrete and formwork          4. Erection of steel structures          5. Installation of prefabricated reinforced concrete structures          6. Bricklaying          7. Floors          8. Facades , stucco and dry construction          9. Industrial Floor          10. Roofs and flat roofs          11. Examination</p> <p>Exercise :          Exercise 1          Rules shortages and calculations bulldozers + calculation example          Rules shortages and calculations scrapers + calculation example          Exercise 2          The balance of earth masses          Rules shortages excavators + calculation example          Principles of shortages of transport + calculation example          Exercise 3          Rules shortages cranes + calculation example          Rules for selection of slings + calculation example          Exercise 4          Rules shortages formwork , horizontal and vertical partitions + calculation example          Fresh concrete pressure + calculation example          Exercise 5          The principles of assembly work ? and examples of variants of          The location of the crane and its work ? examples          Landfills and roads ? examples          Exercise 6          Principles of shortages of materials - insulation , concrete , walls , facades floor in terms of what solutions are acceptable and which are not ? examples          Exercise 7          Colloquium 45 minutes (test with 30 questions )</p>	
<b>Basic bibliography:</b>	
1. Alma mater	
<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	22	4
Contact hours	8	2
Practical activities	10	2