

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Technology of Building Works</b>		Code <b>1010101141010100494</b>
Field of study <b>Civil Engineering First-cycle Studies</b>	Profile of study (general academic, practical) <b>(brak)</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>full-time</b>	
No. of hours Lecture: <b>30</b> Classes: <b>15</b> Laboratory: <b>-</b> Project/seminars: <b>15</b>		No. of credits <b>4</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 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</p> <p>Exercise:          - Test after exercise.</p> <p>Projects:          - Commitment to and defense of the project</p>	
<b>Course description</b>	
<p>Lectures:</p> <ol style="list-style-type: none"> <li>1. Introduction and discussion of the principles of technology works</li> <li>2. Technology earthmoving</li> <li>3. Concrete and formwork</li> <li>4. Erection of steel structures</li> <li>5. Installation of prefabricated reinforced concrete structures</li> <li>6. Bricklaying</li> <li>7. Floors</li> <li>8. Facades , stucco and dry construction</li> <li>9. Industrial Floor</li> <li>10. Roofs and flat roofs</li> <li>11. Examination</li> </ol> <p>Exercise :</p> <p>Exercise 1          Rules shortages and calculations bulldozers + calculation example          Rules shortages and calculations scrapers + calculation example</p> <p>Exercise 2          The balance of earth masses          Rules shortages excavators + calculation example          Principles of shortages of transport + calculation example</p> <p>Exercise 3          Rules shortages cranes + calculation example          Rules for selection of slings + calculation example</p> <p>Exercise 4          Rules shortages formwork , horizontal and vertical partitions + calculation example          Fresh concrete pressure + calculation example</p> <p>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</p> <p>Exercise 6          Principles of shortages of materials - insulation , concrete , walls , facades floor in terms of what solutions are acceptable and which are not ? examples</p> <p>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	75	4
Contact hours	60	3
Practical activities	15	2