

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Technology of Building Works		Code 1010101141010110494
Field of study Civil Engineering First-cycle Studies	Profile of study (general academic, practical) general academic	Year /Semester 2 / 4
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: 15 Laboratory: - Project/seminars: 15		No. of credits 4
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art		ECTS distribution (number and %)
Responsible for subject / lecturer: 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		Responsible for subject / lecturer: 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
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The student has a basic knowledge of technology and building materials.
2	Skills	Able to obtain information from the literature and other sources. It can combine the information obtained.
3	Social competencies	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.
Assumptions and objectives of the course: Transfer of knowledge engineering technology works zero state, raw and finishing and suitability of construction materials at the stage of execution.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
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]]		
Skills:		
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]]		
Social competencies:		
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]]		
Assessment methods of study outcomes		

<p>Lectures: - A written examination</p> <p>Exercise: - Test after exercise.</p> <p>Projects: - Commitment to and defense of the project</p>	
Course description	
<p>Lectures:</p> <ol style="list-style-type: none"> 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>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>	
Basic bibliography:	
1. Alma mater	
Additional bibliography:	
Result of average student's workload	
Activity	Time (working hours)

Student's workload		
Source of workload	hours	ECTS
Total workload	60	4
Contact hours	30	2
Practical activities	30	2