

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Preparation of a diploma thesis with elements of scientific research		Code 1010101271010138786
Field of study Environmental Engineering First-cycle Studies	Profile of study (general academic, practical) (brak)	Year /Semester 4 / 7
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: - Classes: 5 Laboratory: - Project/seminars: -		No. of credits 15
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 15 100%
Responsible for subject / lecturer: dr hab. inż. Mieczysław Porowski, prof. nadzw. email: mieczyslaw.porowski@put.poznan.pl tel. 61,665-2414 Faculty of Civil and Environmental Engineering ul. Piotrowo 5 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The scope of knowledge obtained within the subjects appearing in the first-cycle full-time studies program.
2	Skills	Skills acquired in the course of full-time first-cycle studies in the field of design, construction and operation of installations in buildings and external sanitary networks in the field of environmental engineering.
3	Social competencies	Ability to work independently on a designated task.
Assumptions and objectives of the course: Preparing the student for an independent engineering diploma thesis.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student ma wiedzę zdobytą w dotychczasowym procesie kształcenia, niezbędną do przygotowania pracy inżynierskiej w zakresie określonym w temacie pracy dyplomowej - [K_W03, K_W04, K_W07]		
2. Student ma wiedzę z zakresu metod rozwiązywania problemów technicznych - [K_W07]		
Skills:		
1. Student potrafi sformułować tezy pracy, dobrać i zastosować właściwą metodę rozwiązania zadania i wyciągnąć wnioski na podstawie zebranego materiału - [K_U12, K_U14]		
2. Student korzysta z technologii informacyjnych, zasobów internetu oraz innych źródeł do wyszukania informacji niezbędnych do przygotowania pracy dyplomowej - [K_U01, K_U07]		
Social competencies:		
1. Student ma świadomość konieczności podnoszenia kwalifikacji zawodowych - [K_K01]		
2. Student potrafi formułować wnioski i opisywać wyniki prac własnych - [K_K04]		
3. Student samodzielnie uzupełnia i poszerza wiedzę w zakresie nowoczesnych technik, procesów i technologii w inżynierii środowiska - [K_K01, K_K07]		
Assessment methods of study outcomes		
Ongoing consultations checking progress, substantive correctness and the degree of the diploma thesis. The evaluation is issued by the supervisor of the diploma thesis.		

Course description		
Program contents in accordance with the detailed tasks given in the subject of the diploma thesis.		
Basic bibliography:		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
1. Own work - preparation of the diploma thesis and for scientific research	3	
2. Direct consultations with the promoter	372	
Student's workload		
Source of workload	hours	ECTS
Total workload	255	15
Contact hours	5	2
Practical activities	0	0