

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Computer Aided Structural Design		Code 1010101231010130660
Field of study Environmental Engineering First-cycle Studies	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
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: 15 Classes: - Laboratory: 15 Project/seminars: -		No. of credits 3
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		ECTS distribution (number and %)
Responsible for subject / lecturer: dr inż. Fabian Cybichowski email: fabian.cybichowski@put.poznan.pl tel. 61 665 24 14 Wydział Budownictwa i Inżynierii Środowiska ul. Piotrowo 5 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Knowledge about MS Excel, level intermediate.
2	Skills	Ability to work with personal computer, including MS Excel.
3	Social competencies	Awareness of the need to continually update and supplement knowledge and skills.
Assumptions and objectives of the course: Familiarize students with advanced MS Excel, in particular with the VBA addition.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student zna podstawy programowania w języku Visual Basic - [K_W07]		
2. Student zna możliwości programu Excel w zakresie tworzenia i wykorzystywania makropoleceń - [K_W07]		
3. Student zna metody tworzenia interaktywnych elementów arkusza oraz formularzy - [K_W07]		
4. Student zna podstawy tworzenia programów w dodatku VBA do programu Excel - [K_W07]		
Skills:		
1. Basic programming skills in Visual Basic - [K_U02, K_U07, K_U09]		
2. The student can write user functions in Excel VBA - [K_U02, K_U07, K_U09]		
3. Student is able to create forms and interactive elements in Excel spreadsheet - [K_U02, K_U07, K_U09]		
Social competencies:		
1. The student is aware of the value of information and knowledge - [[K_K07]		
Assessment methods of study outcomes		
Podstawowy sposób sprawdzania efektów kształcenia: w ramach wykładu sprawdzian pisemny - test wielokrotnego wyboru przeprowadzany na ostatnich zajęciach, w ramach ćwiczeń laboratoryjnych ? kolokwium na ostatnich zajęciach.		
Course description		

Basic method for checking the effects of education: (lecture) multiple choice test performed on the last class, (laboratory exercises) ability test performed on the last class.		
Basic bibliography: 1. John Walkenbach, Excel 2013 PL. Programowanie w VBA dla bystrzaków. Wydawnictwo Helion.		
Additional bibliography: 1. John Walkenbach, Excel 2013 PL. Programowanie w VBA. Vademecum Walkenbacha. Wydawnictwo Helion.		
Result of average student's workload		
Activity	Time (working hours)	
1. Lectures	15	
2. Preparation for laboratory lessons	6	
3. Laboratory lessons	15	
4. Preparation for final tests	6	
Student's workload		
Source of workload	hours	ECTS
Total workload	42	3
Contact hours	30	2
Practical activities	12	1