		STUDY MODULE D	ESCRIPTION FORM					
	f the module/subject tressed Concret	Code 1010101161010113387						
Field of		at avala Studioa	Profile of study (general academic, practical)					
	Engineering Firs	st-cycle Studies	general academic 3/					
Elective	path/specialty	-	Subject offered in: Polish					
Cycle of	^s study:		Form of study (full-time,part-time)					
	First-cyc	ele studies	full-time					
No. of h	ours		No. of credits					
Lectur	e: 15 Classes	15 2						
Status o	of the course in the study	ield)						
		major	unive	ersity-wide				
Educatio	on areas and fields of sci	ECTS distribution (number and %)						
techr	ical sciences			2 100%				
	Technical scie	2 100%						
Resp	onsible for subje	ect / lecturer:	Responsible for subject	ct / lecturer:				
dr ir	iż. Jacek Ścigałło		dr inż. Jacek Ścigałło					
ema	il: jacek.scigallo@put	.poznan.pl	email: jacek.scigallo@put.poznan.pl					
	+48 061 665 2465 ulty of Civil and Envirc	opmontal Engineering	tel. + 48 061 665 2465 Faculty of Civil and Enviror	montal Engineering				
	785 Poznań, ul.Piotrov	a b	60-785 Poznań, ul.Piotrowo	0 0				
Prere	quisites in term	s of knowledge, skills an	d social competencies:					
1	Knowledge	A student has the knowledge of general mechanics and strength of materials, basis of theory of reinforced concrete structures, knows analysis principles of simple and complex RC elements design. A student knows building standards and requirements concerning design of building structures and their elements.						
2	Skills	A student can estimate and rep Student can classify building str	A student can estimate and report permanent and variable loads acting on building structures. tudent can classify building structures, design RC structure elements and choose analytical r numerical solution of engineering problems.					
3	Social	A student understands the need for lifelong learning and knows how to interact in a group.						
	competencies							
-The g	aining of knowledge a	ectives of the course: nd skills concerning design of RC s. Preparing for modeling of RC s						
	•	mes and reference to the	educational results for	a field of study				
	/ledge:							
		design method of RC slab eleme	Ľ	· · ·				
		sign issues of spatial RC structure						
	udent knows the range 08, K 2 W16]	e applying of computers program	needed to analyse and design F	KU STRUCTURES				
Skills	5							
	udent uses building sta res [K 2 W01, K 2 V	andards of loads on building struc V02, K 2 W03,]	tures as well as in the static cal	culation and dimensioning of RC				
2. A student is able to design RC slab structures with taken frames into consideration - [K 2 W03, K 2 W13]								
Social competencies:								
1. A student understands the need of lifelong learning, is able to organize the learning process of others [K 2 W02, K 2 W03]								
2. A student is able to cooperate and work in a group - [K 2 W01, K 2 W06]								
3. He c	correctly identifies and	resolves problems associated wit	th his profession - [K 2 W07]					

	Assessment metho	ods of study outc	omes					
-Credit of exerc	ise classes							
Credit in written	form (1.0h)							
Credit of projec	()							
	dividual projects on the basis of calculations a	nd structural drawings	with a defence of	of submitted work				
Number of eval		J						
[%]	(grade)							
100-91	A excellent							
90- 75								
74-65 C good								
64- 51	D sufficient							
< 50	E failed							
	Course	description						
-Form of teachi	ng: classes							
Method of designing and dimensioning RC slab structures especially two-way reinforced slabs								
Load report in two-way reinforced slabs								
Dimensioning o	f reinforced concrete slab structures to bendir	ig and shear ULS, SL	S.					
Form of teachin	ng: projects							
Project of two-v	vay reinforced slab							
Basic biblio	ography:							
1. PN-EN 1992	-1-1 Eurokod 2. Projektowanie konstrukcji z be	etonu. Część 1-1: Regi	uły ogólne i reguł	y dla budynków.				
2. Ajdukiewicz A.: Eurokodu 2. Podręczny skrót dla projektantów konstrukcji żelbetowych.								
3. Starosolski W.: Konstrukcje żelbetowe według PN-B-03264:2002 i Eurokodu 2. PWN								
4. Knauff M.: Obliczanie konstrukcji żelbetowych według Eurokodu, PWN Warszawa 2012								
5. Knauff M., Golubińska A.: Tablice i wzory do projektowania konstrukcji żelbetowych z przykładami obliczeń, PWN Warszawa 2013								
6. Łapko A., Ja	nsen B.C.: Podstawy projektowania i algorytm	y obliczeń konstrukcji z	żelbetowych, Ark	ady, Warszawa 2005				
7. Rawska-Sko	tniczy A.: Obciążenia budynków i konstrukcji b	udowlanych według E	urokodów, PWN	, Warszawa 2013.				
Additional k	oibliography:							
	trukcji Betonowych KILiW PAN Podstawy projo Inośląskie Wydawnictwo Edukacyjne.	ektowania konstrukcji ż	elbetowych i spr	ężonych według				
2. Mosley B., B	ungey J., Hulse R.: Reinforced concrete desig	n to Eurocode 2, Palgr	ave Macmillan N	lew York 2009.				
	Result of average	student's workle	bad					
	Time (working							
1. Participation	hours)							
2. Participation	15							
 Participation Complete (at 	15							
• •	5							
•	in the consultations associated with the audie the final test of classes content	nee and design classes	5	5 10				
		s workload						
	Source of workload		hours	ECTS				
-		60						
Total workload	2							
Contact hours 35 Practical activities 25				1				
Practical activiti	1							