

Study program:	Civil Engineering		
Level of study:	Undergraduate academic studies or Master academic studies or PhD studies		
Course title:	FOUNDATION STRUCTURES		
Teacher:	PETAR SANTRAC		
Course Status:	Obligatory		
Credits (ECTS):	5		
Prerequisite:	Basic of Foundation		
Course objective(s):			
The subject aims to provide basic knowledge of the fundamental design of complex systems, analysis of shallow foundations (beams, grids, slabs) on a deformable media, deep foundations in the deformable media, soil and foundation interaction, application of computers in foundation analysis.			
Course outcome(s):			
The realization of the planned objectives.			
Course Content:			
1 st week	Introduction, literature, legislation, commercial software in Foundation analysis.		
2 nd week	Beam on deformable subgrade		
3 rd week	Beam on deformable subgrade		
4 th week	Raft on deformable subgrade		
5 th week	Mats and slabs on deformable subgrade		
6 th week	Application of computers for analysis of shallow foundations on deformable subgrade		
7 th week	Soil structure interaction		
8 th week	Deep massive foundation in deformable medium		
9 th week	Deep foundation – piles in deformable medium		
10 th week	Deep foundation – piles in deformable medium		
11 th week	Application of computers for analysis of deep foundations in deformable medium		
12 th week	Retaining walls in deformable medium		
13 th week	Retaining walls in deformable medium		
14 th week	Application of computers for analysis of deep foundations in deformable medium		
15 th week	Seismic analysis of shallow and deep foundations		
Literature:			
1. P.Santrač: Foundation - written lectures, "Faculty of Civil Engineering Subotica", Subotica, 2006.			
2. B. Ilić: Foundation I, "Faculty of Civil Engineering Subotica", Subotica, 1998.			
3. S. Stevanović: Foundation I, "Naučna knjiga", Belgrade, 1989.			
4. E. Nonweiler: Soil mechanics and foundation construction, "Školska knjiga", Zagreb, 1990.			
5. Group of authors: Complicate foundation, "Naučna knjiga", Belgrade, 1980.			
6. K. Sechy: Errors in building construction, "Građevinska knjiga", Belgrade, 1975.			
Number of hours:			Other classes: 0
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Individual research work: 0
Teaching methods: Lectures, exercises, seminars, consultations			
Evaluation of knowledge (maximum 100 points)			
Pre-exam activities	points	Final exam	points
Activity during the lectures	5	Written exam	25
Activity during the exercises	0	Oral exam	45
Seminar papers	25	-	-
Colloquias	25		