FOUNDATIONS DESIGN										
1	Course Title:	FOUND	ATIONS DESIGN							
2	Course Code:	INS4073								
3	Type of Course:	Optional								
4	Level of Course:	First Cycle								
5	Year of Study:	4								
6	Semester:	7								
7	ECTS Credits Allocated:	5.00								
8	Theoretical (hour/week):	3.00								
9	Practice (hour/week):	1.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	None								
12	Language:	Turkish								
13	Mode of Delivery:	Face to face								
14	Course Coordinator:	Dr. Ögr. Üyesi YEŞİM SEMA ÜNSEVER								
15	Course Lecturers:									
16	Contact information of the Course Coordinator:	unsever@uludag.edu.tr								
17	Website:	insaat.uludag.edu.tr								
18	Objective of the Course:	The aim of this course is to show how to apply soil mechanics theory to foundation design. In lectures, types of foundations are defined and two important criteria for foundation design such as settlement and bearing capacity calculations are introduced. Moreover, types of retaining walls and their design methods are determined.								
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
		1	To be able to define type of field tests and their applications							
		2	To be able to calculate immediate and consolidation settlements of cohesive and cohesionless soils							
		3	To be able to calculate bearing capacity of cohesive and cohesionless soils							
		4	To be able to learn shallow foundation types and how to design them							
		5	To be able to learn retaining wall types and how to design them							
		6								
		7								
		8								
		9								
		10								
21										
VA/ach	Theoretical	Durse Content:								
VVEEK	Introduction to the foundation design		Practice							
1	introduction to the foundation design	1								

2	Geotechnical and Index properties: Laboratory testing, settlement and str correlations	rength	Theory, Problem Session								
3	Exploration, Sampling and in-situ soil measurements		ΤI	Theory, Problem Session							
4	Bearing Capacity of Foundation: Cap Equations and effect of water table	acity	TI	Theory, Problem Session							
5	Bearing Capacity of Foundation: Laye soils, Capacity from in-situ tests	ered	Theory, Problem Session								
6	Foundation Settlement: Stress, Spec loading cases	ial	Theory, Problem Session								
7	Foundation Settlement: Immediate Settlement computations, rotation of	bases	Theory, Problem Session								
8	Foundation Settlement: Elastic settler Consolidation settlements	ment,	Theory, Problem Session								
9	Shallow foundation design: Single for continues footing	oting,	Theory, Problem Session								
10	Mat Foundation Design		TI	Theory, Problem Session							
11	Retainig Walls		Т	Theory, Problem Session							
12	Retaining Walls		Т	heory, Problem Sessio	n						
13	Single Piles-Static Capacity and Late Loads	ral	Т	Theory, Problem Session							
14	Single Piles-Static Capacity and Late Loads	ral	Theory, Problem Session								
Activit	ies			Number	Duration (hour)	Total Work Load (hour)					
Theore	tical		llr	traduction to Geotechi	icalEngineering.P	aptice Hall,					
Practic	als/Labs			14	1.00	14.00					
Self stu	dy and preperation			riey and Sons, New Yo	900 essentials of S	84.00					
Homew	vorks		110	2	5.00	10.00					
Project	8		٦	<del>lentice нап, opper sa</del> 0	0.00	sey. 0.00					
Field S	tudies		-	0	0.00	0.00					
Meietter	EAXENING ACTIVITIES	NUMBE	W	ÉIGHT	2.00	2.00					
Others			-	0	0.00	0.00					
Final E	Xams	1	5	2,00 1	2.00	2.00					
Total V	Vork Load	<u>^</u>	مل	<u></u>		154.00					
Total w	vork-project ork.load/.30 hr	2	Γ	0.00		5.13					
ECTS	Credit of the Course		ىمل			5.00					
готаг		4	Π	00.00							
Contrib Succes	oution of Term (Year) Learning Activitie ss Grade	es to	40.00								
Contrib	ution of Final Exam to Success Grade	;	60.00								
Total			100.00								
Measu Course	rement and Evaluation Techniques Us	ed in the									
24	ECTS / WORK LOAD TABLE										

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	4	4	3	3	4	3	0	0	3	0	0	0	0	0	0	0
ÖK2	5	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	4	3	0	4	0	0	0	0	0	0	0	0	0	0	0
ÖK4	5	4	4	3	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	5	4	4	3	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	ontrib 1 very low tion evel:				2 low		3 Medium			4 High			5 Very High			