	FUNDAMENTALS	OF T	ECHNICAL INSTALLATION							
1	Course Title:	FUNDAMENTALS OF TECHNICAL INSTALLATION								
2	Course Code:	MAK421	3							
3	Type of Course:	Optional								
4	Level of Course:	First Cyc	le							
5	Year of Study:	4								
6	Semester:	7								
7	ECTS Credits Allocated:	4.00								
8	Theoretical (hour/week):	3.00								
9	Practice (hour/week):	0.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	-								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	ace							
14	Course Coordinator:	Prof. Dr.	RECEP YAMANKARADENİZ							
15	Course Lecturers:	Prof.Dr.F	RecepYAMANKARADENiZ							
16	Contact information of the Course Coordinator:	e-posta: telefon: 2 adres: U	can@uludag.edu.tr 224 2941957 ÜMMF, Makine Müh. Blm.							
17	Website:									
18	Objective of the Course:	Heating, analysis tudents v	ventilation, air conditioning and fire installations, design, and simulation of basic knowledge and skills to provides vhat they need, is the main purpose of this course.							
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
		1	Prepare heating project							
		2	Prepare ventilation project							
		3	Design for air conditioning system							
		4	Design for fire installation system							
		5	Select the project equipments							
		6								
		7								
		8								
		9								
		10								
21	Course Content:									
	Course Content:									
Week		f	Practice							
1	General information about heat trans	rer								
2	General Information about heating sy	stems								
3		•								
4	transmission components and system	ns ns								
5	Pipe diameter									

6	Installation of valves and fittings, fixtures																				
7	Heating devices																				
8	Repeating courses and midterm exam																				
9	Circu	Circulation pumps																			
10	Auto heati	mation ing s	c cont ysterr	trol co ns	mpon	ents us	sed in	I													
11	Boos	sters	and b	ourner	s																
12	Ther	mal i	insula	tion a	nd TS	825															
13	Fire	syste	ems																		
14	High buildings fire system equipments																				
22	Textbooks, References and/or Other Materials:									 Teknik Tesisat Esasları Ders Notu, A. Avcı, M.Can ve A.B.Etemoğlu Sıcak Sulu Kalorifer Tesisat, Prof.Dr. A. Kemal Dağsöz. Doğalgaz, tanım , cihazlar , devreleri, hesabı, Prof.Dr.A.KemalDağsöz. Termodinamik Isıtma, Soğutma, Havalandırma, Klima, Yalıtım, Doğalgaz Teknolojisi Dergisi. İzolasyon Dünyası,Isı , Ses, Su, Yangın izolasyonu Dergisi. 											
23	23 Assesment																				
TERM L	EAR	NING	ACTI	VITIES	;		1	NUMBE R	= W	WEIGHT											
Midtern	n Exa	ım					ŕ	1	3	30.00											
Activites										Numb	ber		Dura	ition (Total Work Load (hour)						
+beore	theoretical 4										1 0 1.00				3.00 42.00						
Practicals/Labs										0				0.00			0.00				
SFUCCE	Self Grad Stade preperation									12				3.00			36.00				
Homew	omeworks									0				0.00			0.00				
Poppin ct	(main a second s									100.00				15.00			30.00				
Field St	ïeld Studies									0.00					0.00						
Anne	Muttem exams									1				10.00			10.00				
Others	Dthers										2 10.00				20.00						
Final E	nal Exams										1				12.00 12.00						
Total W	otal Work Load												150.00								
Total w	Fotal work load/ 30 hr										5.00										
ECTS (CTS Credit of the Course									4.00											
25	5 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																				
	F	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ	8 PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16				
ÖK1	4	1	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
ÖK2	4	4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
ÖK3	4	1	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0				
ÖK4	4	4 5 5 0 0 0 0 0							0	0	0	0	0	0	0	0	0				

ÖK5	4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very low ution Level:			:	2 low			3 Medium			4 High			5 Very High			