

SANITARY INSTALLATIONS

1	Course Title:	SANITARY INSTALLATIONS	
2	Course Code:	MAK4068	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	8	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç. Dr. ERHAN PULAT	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Tel: 0224 294 1973 e-mail: ilhami@uludag.edu.tr U. Ü. Müh.-Mim. Fak. Makina Böl. BURSA	
17	Website:		
18	Objective of the Course:	The definition and classifications of energy, the position of renewable energy in this classification, the types of renewable energy and explaining each type in detail.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To learn the definitions and functions of sanitary equipments.
		2	To understand the explanation of how the sanitary equipments work,
		3	To learn the fundamentals of preparing a project.
		4	Getting the ability of designing a project.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	1.Lesson: The explanation of course and course content 2.Lesson: The coverage of the course		

2	1. Lesson: Fundamental concept 2. Lesson: Fundamental concept, asking each student to obtain a building architecture project to design sanitary project			
3	1. Lesson: Clean water equipments 2. Lesson: Clean water equipments and calculating the pipe diameter			
4	1. Lesson: Hot water equipments and calculating the pipe diameter 2. Lesson: Obtaining, storing and pressurising clean water			
5	1. Lesson: Sewage equipments 2. Lesson: Sewage equipments and calculating the pipe diameter			
6	1. Lesson: Collecting and draining rain 2. Lesson: Sewage distillation			
7	1. Lesson: Fire extinguishing equipments 2. Lesson: Fire extinguishing equipments			
8	1. Lesson: Swimming pools 2. Lesson: Swimming pools			
9	1. Lesson: Solar collectors			
Activites		Number	Duration (hour)	Total Work Load (hour)
10	Repeating courses and midterm exam	14	2.00	28.00
11	1. Lesson: Sample Project			
Practicals/Labs		0	0.00	0.00
Self study and preperation		14	2.00	28.00
Homeworks		1	20.00	20.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams		1	6.00	6.00
Others		0	0.00	0.00
Final Exam		1	6.00	6.00
Total Work Load				88.00
Total work load/ 30 hr				2.93
22	Textbooks, References and/or Other	1	Sihhi Tesisat Proje Uygulama Esasları, Makine	
ECTS Credit of the Course				3.00
		2. Sıdal, C. ve Öz, E. S., Yapıda Sihhi Tesisat, Birsen Yayınevi, İstanbul, 1996. 3. Arpad, A., Uygulamalı Yapı Tesisatı, Birsen Yayınevi, İstanbul, 1981. 4. Akyarlı, H., Tesisat, 9 Eylül Üniversitesi, İzmir, 1989. 5. Sönmez, F., Tesisat, Cihan Matbaası, Ankara, 1976. 6. Sihhi Tesisat, Isısan Yayın No: 147, 1997. 7. TS1258 Temiz Su Tesisatı Hesap Kuralları 8. TS826 Konutlarda Kirli ve Pis su ile Yağmur Suları Hesap Esasları 9. TS827 Konutlarda Kirli ve Pis su ile Yağmur Suları Tesis Kuralları 10. Bayındırlık Bakanlığı Sihhi Tesisat Talimatnamesi		
23	Assesment			
TERM LEARNING ACTIVITIES		NUMBE R	WEIGHT	

Midterm Exam	1	30.00
Quiz	0	0.00
Home work-project	1	20.00
Final Exam	1	50.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade	50.00	
Contribution of Final Exam to Success Grade	50.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course		
24	ECTS / WORK LOAD TABLE	

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							