

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Energy Storage							
Course Code		AEK211		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of t	he Course	Various energ energy storate heat transfer,	y storage met methods, pha environmental	hods, hea ase-chang impacts o	t-solar energy jing materials of heat energy	/ storage, det , simple and / storage.	ailed informaticomplex geor	tion, utilization of h netry and phase-c	leat hanging
Course Conte	nt	Fundamental storage, batter hidden heat st and comlex ge	concepts and ries and variet orage, phase- cometries, the	descriptio ies, batter changing ir environr	ns, energy sto ies, solar-hea materials, he nental impact	brage system at energy stor at transfer ar s.	s and varietie age systems, id stratification	s. Chemical energ sensual heat stor n, their modelling,	ly age, simple
Work Placeme	ent	N/A							
Planned Learning Activities and Teaching Methods			Explanati	on (Presenta	tion), Discuss	sion, Individua	I Study, Problem	Solving	
Name of Lecturer(s)		Ins. Emre IŞIK	(LI						

Assessment Methods and Criteria

Method	Quantity Percentage (
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1 Alternatif Enerji Kaynakları Yazar: Mustafa Acaroğlu

Week	Weekly Detailed Cours	ed Course Contents			
1	Theoretical	Giriş ve Temel Kavramlar			
2	Theoretical	Enerji Depolama Sistemleri; Mekanik, Manyetik Enerji Depolama.			
3	Theoretical	Enerji Depolama Sistemleri: Kimyasal Enerji Depolama, Piller ve Çeşitleri			
4	Theoretical	Enerji Depolama Sistemleri; Hidrojen ile Enerji Depolama, Isıl Enerji Depolama			
5	Theoretical	Isıl Enerji Depolama Yöntemleri ve Çeşitleri			
6	Theoretical	Duyulur Isıl Enerji Depolama, Isı Transferi ve Katmanlaşma			
7	Theoretical	Mekanik depolama sistemleri			
8	Intermediate Exam	Mid-term exam			
9	Theoretical	Elektro-Kimyasal depolama sistemleri			
10	Theoretical	Elektromanyetik depolama sistemleri			
11	Theoretical	Termal depolama sistemleri			
12	Theoretical	Kimyasal depolama sistemleri: Kömür			
13	Theoretical	Kimyasal depolama sistemleri: Hidrojen			
14	Theoretical	Kimyasal depolama sistemleri: Doğalgaz, Biyokütle			
15	Final Exam	Final exam			

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	1	10	1	11
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
		1	otal Workload (Hours)	75
		[Total Workload	(Hours) / 25*] = ECTS	3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes



2	
3	
4	
5	

Progra	amme Outcomes (Alternative Energy Sources Technology)
1	To have knowledge about basic science and technology.
2	To have knowledge about basic energy and alternative energy sources.
3	To have knowledge about basic electrical and electronic laws.
4	To have knowledge about the installation and operation of energy facilities.
5	Learning the methods of recycling of waste and use of energy.
6	To have experience in energy generation and project design.

Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High

	L1	L2	L3	L4	L5
P1	4	5	5	5	5
P2	5	5	5	5	5
P3	4				
P4		3	3	3	3
P6		4	4	4	4

