



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Electric Production Using Wind Energy							
Course Code		AEK111		Couese Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	78 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		It is aimed students to get acquainted with electric wind turbines, determining system capacity, gaining competency on their assembly and test.							
Course Content		Implementing load analysis, measuring direction and strength of wind, determining appropriate turbing height, determining assembly points, interpreting fundamental connections, and bearing systems, understaning wind turbin tower, wing, and generator connections. Performing electrical connections and testing them, determining number of batteries required, connecting charge unit, setting battery groups, determining inverter capacity, their connetion, establishing grid in- and out-puts.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)									

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
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Week	Weekly Detailed Course Contents	
1	Theoretical	Yük analizini yapmak
2	Theoretical	Rüzgâr hız ve yön ölçümlerini yapmak
3	Theoretical	Uygun türbin yüksekliğini belirleyerek güç hesabı yapmak
4	Theoretical	Montaj yerini tespit etmek
5	Theoretical	Temel bağlantıları ve taşıyıcı sistemini oluşturmak
6	Theoretical	Rüzgâr türbinin kule, kanat, mil ve generatör bağlantılarını oluşturmak
7	Theoretical	Rüzgâr türbinin elektriksel bağlantılarını ve testlerini yapmak
8	Intermediate Exam	Mid-term exam
9	Theoretical	Akü sayısını hesaplamak, Şarj regülatör bağlantısı gerçekleştirmek
10	Theoretical	Akü gruplandırmasını oluşturmak
11	Theoretical	Evirici kapasitesini belirlemek
12	Theoretical	Evirici bağlantısını oluşturmak
13	Theoretical	Şebeke giriş çıkışlarını oluşturmak
14	Theoretical	Sayaç grubunu tesis etmek
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	3	56
Project	5	1	1	10
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
Total Workload (Hours)				78
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	
2	
3	
4	
5	

Programme 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
P2	3	3	3	3	3
P4	5	5	5	5	5
P5	4	4	4	4	4
P6	4	4	4	4	4

