AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Electric Production With Solar Energy								
Course Code	AEK201		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	55 *(Hours)*	Theory	2	Practice	1	Laboratory	0
Objectives of the Course	Students are expected to get acquainted with solar energy panels, determining system size and capacity, their assembly and test; as well as gain relevant skills.								
Course Content	Implementing load analysis, determining solar cell type and power, structuring photovoltaic series, exploring assembly location, assembly adjustments, settin bearing system, fixing PV pannels, setting electrical connections and their test, power storage, charging regulators and inverters, their connections to the grid and systems.								
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	60

Recommended or Required Reading	
1	Alternatif Enerji Kaynakları Yazar: Mustafa Acaroğlu

Week	Weekly Detailed Course Contents	
1	Theoretical	Yük analizini yapmak
2	Theoretical	Güneş pili tipi ve gücünü belirlemek
3	Theoretical	Fotovoltaik dizisini oluşturmak
4	Theoretical	Montaj yerini tespit etmek
5	Theoretical	Yönlendirme ve eğim açısını belirlemek
6	Theoretical	Taşıyıcı karkası oluşturmak PV panelleri sabitlemek
7	Theoretical	PV panellerin elektriksel bağlantılarını ve testlerini gerçekleştirmek
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	13	0	2	26
Lecture - Practice	13	0	1	13
Project	2	0	1	2
Midterm Examination	1	6	1	7
Final Examination	1	6	1	7
			Total Workload (Hours)	55
			[Total Workload (Hours) / 25*] = **ECTS**	2
**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	5	5	5	5	5
P3	3	3	3	3	3
P4	4	4	4	4	4
P5	4	4	4	4	4
P6	3	3	3	3	3