AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Control and Automation						
Course Code	AET203		Couse Level		Short Cycle (Associate's Degree)		
ECTS Credit	5	Workload	120 *(Hours)*	Theory	2	Practice	1	Laboratory	0
Objectives of the Course	In this lesson students will be able to prepare the systems that would meet the needs of automation in the topics like basic flow, storage, mechanization, thermo processes that is used in renewable energy technologies.						
Course Content	Mounting Flow Control Components, Flow Control Circuit, Mounting Level Sensors, Mounting fluid level censor, Mounting Pump and Release Valve, Motor control circuits, mounting of motor sensors, mounting of heat sensor, heat control circuits, heating system connections, mounting switching element, mounting indicator and marker						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods		Explanation (Presentation), Demonstration, Problem Solving					
Name of Lecturer(s)	Ins. Cemal GÖVEN						

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Automatic Control Systems-Muammer Gökbulut

Week	Weekly Detailed Course Contents	
1	Theoretical	Mounting Flow Control Components
2	Theoretical	Flow Control Circuit
3	Theoretical	Mounting Level Sensors
4	Theoretical	Mounting fluid level censor
5	Theoretical	Mounting Pump and Release Valve
6	Theoretical	Motor control circuits
7	Theoretical	Motor control circuits
8	Theoretical	mounting of motor sensors
9	Theoretical	mounting of heat sensor
10	Theoretical	heat control circuits
11	Theoretical	heat control circuits
12	Theoretical	heating system connections
13	Theoretical	mounting switching element
14	Theoretical	mounting indicator and marker

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	0	1	14
Assignment	7	4	0	28
Term Project	1	14	0	14
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
			Total Workload (Hours)	120
			[Total Workload (Hours) / 25*] = **ECTS**	5

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Setting power monitoring and control system
2	Setting level control system
3	Setting motor control system
4	Setting heat control system
5	Güç İzleme ve Kontrol Sistemi Kurmak

Programme Outcomes *(Alternative Energy Sources Technology)*

1	Carry out installing work
2	Do mechanical drawing
3	Do pipe welding
4	Do basic electricity works
5	Do Computer assisted design
6	Install solar energy hot water preparation system.
7	Do measurement and calculations practices.
8	Do basic practices of geothermal energy.
9	Install control and automation system.
10	Install domestic water heating system with solar energy.
11	Generate electricity with solar energy
12	Generate electricity with wind power
13	Do geothermal energy practices
14	Install domestic cooling system
15	Do heating pump practices
16	Manage a business
17	SET UP A WORKPLACE/ BUSINESS (pre-requisite)
18	OBEY VOCATIONAL ETHICAL VALUES
19	RESEARCH AND EVALUA0TION/OBSERVATION
20	SELFIMPROVEMENT WITH USING INFORMATION FACILITIES
21	Knows the effects of all energy sources on the environment.
22	Can communicate in a foreign language
23	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
24	Ability to plan a career in their own profession.
25	To produce solutions by using the laws of physics in the use or design of tools-machines or devices related to the profession.
26	To provide them with knowledge about substance use and addiction problem and prevention methods.

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

	L1	L2	L3	L4	L5
P9	5	5	5	5	5