



AYDIN ADNAN MENDERES UNIVERSITY
SÖKE VOCATIONAL SCHOOL
ELECTRICAL AND ENERGY
ALTERNATIVE ENERGY SOURCES TECHNOLOGY
COURSE INFORMATION FORM

Course Title	Measurement Technique								
Course Code	AET152			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	1	Practice	1	Laboratory	0
Objectives of the Course	With this course student will be able to make every kind of physical and electrical measurement.								
Course Content	Length Measuring, Square Measuring, Volume and Weight Measuring, Fluid Measuring and Heat Measuring, Slope Measuring, Cross-section and Diameter Measuring, Speed and Rotation Measuring, Sound Measuring, Pressure Measuring, Measuring and Measurement Equipment, Measurement Mistakes, Units and Transformations, Voltage measuring, Stream Measuring, Force and Energy Measuring								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Ölçme Tekniği / Prof. Dr. Osman F. Genceli
2	Elektrik Elektronik ve Ölçme Uygulama Kitabı - Engin Tekin, Metin Bereket

Week	Weekly Detailed Course Contents	
1	Theoretical	Length Measuring, Square Measuring
2	Theoretical	Volume and Weight Measuring
3	Theoretical	Fluid Measuring and Heat Measuring
4	Theoretical	Slope Measuring
5	Theoretical	Cross-section and Diameter Measuring
6	Theoretical	Sound Measuring
7	Theoretical	Pressure Measuring
8	Theoretical	Measuring and Measurement Equipment
9	Theoretical	Measurement Mistakes
10	Theoretical	Measurement Mistakes Units and Transformations
11	Theoretical	Units and Transformations
12	Theoretical	Voltage measuring
13	Theoretical	Current Measuring
14	Theoretical	Force and Energy Measuring

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	1	14
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	Measuring physical sizes
2	Measuring electrical sizes
3	Volume and weight meter
4	Measuring Pressure
5	Makes unit conversions.

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 EVALUATION/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

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

	L1	L2	L3	L4	L5
P7	5	5	5	5	5

