



**AYDIN ADNAN MENDERES UNIVERSITY
BUHARKENT VOCATIONAL SCHOOL**

**ELECTRICITY AND ENERGY
ALTERNATIVE ENERGY SOURCES TECHNOLOGY
COURSE INFORMATION FORM**

Course Title	Measurement Technics								
Course Code	AEK105	Course Level			Short Cycle (Associate's Degree)				
ECTS Credit	2	Workload	48 (Hours)	Theory	1	Practice	1	Laboratory	0
Objectives of the Course	Capability to perform basic physical and electrical measurements.								
Course Content	Basic and derivative size of measurement, measurement errors, combination of measurement errors. Classification of analogue measurement tools, their structure, work principles, operation equations and their resolution. Structure, usage and variety of oscilloscopes. Electrical units, measurement through tools, bridges or equation methods. Measurement of circuit elements through various methods. Electrical measurement of physical and mechanical units. Classification of digital measurement tool according to their operation principles.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration								
Name of Lecturer(s)	Ins. Emine ERTÜRK ŞAHİN, Ins. Emre IŞIKLI								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Ölçme Tekniği Yazar: Ali Özdemir
---	----------------------------------

Week	Weekly Detailed Course Contents	
1	Theoretical	1
2	Theoretical	2
3	Theoretical	3
4	Theoretical	4
5	Theoretical	5
6	Theoretical	6
7	Theoretical	7
8	Theoretical	8
9	Intermediate Exam	Mid-term exam
10	Theoretical	10
11	Theoretical	11
12	Theoretical	12
13	Theoretical	13
14	Theoretical	14
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	1	13
Lecture - Practice	13	0	1	13
Individual Work	10	0	1	10
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
Total Workload (Hours)				48
[Total Workload (Hours) / 25*] = ECTS				2

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	They could measure electrical units.
2	Calculate error percentage of measurement tools.
3	Explain functions of oscilloscope.
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
P1	5	5	5	5	5
P3	4	4	4	4	4

