



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

Course Title	Failre Analysis								
Course Code	ELE156			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	In this course, it is aimed to have the students gain the abilities and knowledge of making malfunction analysis.								
Course Content	Finding malfunction units and components								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Case Study, Problem Solving								
Name of Lecturer(s)	Cemal GÖVEN								

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

Recommended or Required Reading	
1	Lecture notes

Week	Weekly Detailed Course Contents	
1	Theoretical	Isolation of malfunction
2	Theoretical	Isolation of malfunction
3	Theoretical	Finding the defective unit or component
4	Theoretical	Finding the defective unit or component
5	Theoretical	Finding the defective unit or component
6	Theoretical	Finding the defective unit or component
7	Theoretical	Finding the defective unit or component
8	Theoretical	Finding the defective unit or component
9	Theoretical	Malfunction and maintenance chart
10	Theoretical	Malfunction and maintenance chart
11	Theoretical	Catalogue
12	Theoretical	Catalogue
13	Theoretical	Archiving
14	Theoretical	Archiving

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
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	Removal of the detected malfunctions by making system analysis
2	Creates fault and maintenance cardboard.
3	Finds the defective unit or element.
4	Creates the catalog of the fault.



5	Makes archiving.
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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
P6	3	3	3	3	5
P7	3	3	4	4	4
P8	3	3	4	4	3
P9	3	3	3	4	3
P10	4	4	3	3	4
P11	4	4	3	3	4
P12	2	4	3	4	4
P13	3	3	3	4	4
P14	2	3	3	4	4

