



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Electrical Power Plants							
Course Code		ELE207		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To make students learn the principles of conditions of power production and operation of any kind of electric power plant.							
Course Content		Methods of electric power production, hydroelectric, thermic, nuclear plants, renewable energy plant types, plant malfunctions							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study					
Name of Lecturer(s)		Ins. Baybars DAL							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Enerji Üretimi, İletim ve Dağıtımı (Öğr. Gör. Abdullah Daşdemir)
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Week	Weekly Detailed Course Contents	
1	Theoretical	Learning of methods of electrical energy production
2	Theoretical	Learning the operation of thermic plants
3	Theoretical	Learning the operation of thermic plants
4	Theoretical	Learning the operation of nuclear plants
5	Theoretical	Learning the operation of hydroelectric plants
6	Theoretical	
7	Theoretical	Learning the operation of renewable energy plants
8	Theoretical	Learning the operation of renewable energy plants
9	Theoretical	Learning the malfunctions in energy plants, choosing and installation of protection relays
10	Theoretical	Learning the malfunctions in energy plants, choosing and installation of protection relays
11	Theoretical	Surge protector, fuse installations
12	Theoretical	Surge protector, fuse installations
13	Theoretical	Carrier system installations
14	Theoretical	Carrier system installations

### 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	Learning the methods of electric power production
2	Learning the operation of thermic plants
3	Learning the operation of nuclear plants
4	Learning the operation of hydroelectric plants
5	Learning the operation of renewable energy plants



6	Learning the malfunctions in energy plants, choosing and installation of protection relays
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**Programme Outcomes (Mechatronics)**

1	TECHNICAL FOREIGN LANGUAGE
2	BASICS OF MECHATRONICS
3	TECHNICAL DRAWING
4	DOING BASIC MECHANIC PROSESSES
5	CHOOSE THE MATERIALS
6	DOING MECHANICAL SYSTEM DESIGN
7	SET UP A HYDRAULIC OR PNEUMATIC SYSTEMS
8	DOING COMPUTER AIDED MECHANICAL DESIGN
9	USING FLEXIBLE PRODUCING SYSTEMS
10	USING COMPUTER AIDED MACHINE TOOLS
11	DOING ELECTRICAL AND ELECTRONICAL
12	SET UP ELECTRICAL AND ELECTRONICAL CIRCUITS
13	SET UP LOGICAL CIRCUITS
14	DOING COMPUTER AIDED ELECTRONICAL CIRCUITS DESIGN
15	SET UP ELECTRICAL MOTORS
16	SET UP MICROCONTROLLER CIRCUITS
17	SET UP CONTROL SYSTEMS
18	COMMUNICATE CONTROL SYSTEMS
19	DOING INDUSTRIAL ROBOTIC PROGRAMMING AND MAINTENANCE
20	WRITING COMPUTER PROGRAMME
21	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
22	Ability to plan a career in their own profession.

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

	L1	L2	L3	L4	L5	L6
P12	2	3	2	1	3	2
P15	2	3	2	1	3	2

