



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Winding Technique								
Course Code	ELE221		Course Level		Short Cycle (Associate's Degree)				
ECTS Credit	6	Workload	150 (Hours)	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	To teach armature, transformer and asynchronous motor winding techniques.								
Course Content	Types of winding, calculation, drawing and applications, Types of transformer windings, structures, winding calculation and sampling, reel and hair preparation, transformer winding, Three-phase asynchronous motor winding types, Hand type, half mold, full pattern and fractional stator winding calculation and winding.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration								
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	Coil Winding in Electrical Machines (Abdullah GÖRKEM)
---	---

Week	Weekly Detailed Course Contents	
1	Theoretical	Structure and working principle of direct current machines
2	Practice	Removal and Isolation of Defective Inverters
3	Theoretical	Winding Shapes, Winding Chart Drawing and Winding Types
4	Theoretical	Simple Parallel and Multi-Parallel Winding
5	Theoretical	Simple Parallel and Multi-Parallel Winding
6	Theoretical	Series Armature Winding
7	Practice	Application related to the varieties of Armature Winding
8	Intermediate Exam	Exam-1
9	Theoretical	Three Phase ASM structure, working principle and control
10	Theoretical	Stator Winding Shapes and Winding Chart Drawing
11	Theoretical	Hand Type Motor Winding
12	Theoretical	Half Formwork Engine Winding
13	Theoretical	Full Mold Engine Winding
14	Practice	Application related to stator winding types

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	3	56
Lecture - Practice	14	2	3	70
Midterm Examination	1	11	1	12
Final Examination	1	11	1	12
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	The industry can draw the winding shapes.
2	Can detect inductor and inductor faults.
3	Can make hand stator winding.



4	Half mold can make stator winding.
5	Can make full mold stator winding.

Programme Outcomes (Electrics)

1	ABILITY TO MAKE APPLICATIONS OF MEASUREMENT AND CALCULATION
2	ABILITY TO MAKE CONNECTIONS OF A DC CIRCUIT
3	ABILITY TO MAKE BASIC ELECTRONIC CIRCUIT AND APPLICATIONS
4	ABILITY TO MAKE ELECTRIC INSTALLMENT APPLICATIONS
5	ADAPTING VOCATIONAL ETHICAL VALUES
6	ABILITY TO MAKE COMMUNICATION
7	ABILITY TO MAKE CONNECTIONS OF AC CIRCUIT
8	ABILITY TO MAKE NUMERICAL CIRCUITS
9	ABILITY TO MAKE INSTALLATIONS OF TRANSFORMER AND DC ELECTRIC MACHINES
10	ABILITY TO MAKE COMPUTER AIDED DESIGN
11	ABILITY TO APPLY VOCATIONAL TECHNICAL METHODS
12	ABILITY TO MAKE INSTALLATIONS OF AC ELECTRIC MACHINES
13	ABILITY TO MAKE SPECIAL ELECTRIC INSTALLMENTS
14	ABILITY TO MAKE INSTALLMENTS OF COMMAND SYSTEMS
15	ABILITY TO DRAW COMPUTER AIDED ELECTRIC SCHEME
16	ABILITY TO MAKE POWER ELECTRONICS CIRCUITS
17	ABILITY TO MAKE SYSTEM ANALYSIS AND PRODUCT DESIGN
18	ABILITY TO IMPROVE ONESELF UTILIZING INFORMATION OPPORTUNITIES
19	ABILITY TO DRAW COMPUTER AIDED ELECTRIC INSTALLMENT PROJECT
20	ABILITY TO MAKE ANALYSIS AND MAINTENANCE OF ELECTRICAL ENERGY PRODUCTION SYSTEMS
21	ABILITY TO MAKE THE WINDING OF ACCURATE AND ALTERNATIVE CURRENT ENGINES
22	ABILITY TO RECOGNIZE SYSTEMS USED IN ELECTRICAL ENERGY TRANSMISSION AND DISTRIBUTION AND TROUBLESHOOTING
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 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
P1	3	3	3	3	3
P7		4	4	4	4
P21	5	5	5	5	5

