AC CIRCUIT ANALYSIS											
1	Course Title:	AC CIRC	CUIT ANALYSIS								
2	Course Code:	EMEZ10	2								
3	Type of Course:	Compuls	ory								
4	Level of Course:	Short Cy	cle								
5	Year of Study:	1									
6	Semester:	2									
7	ECTS Credits Allocated:	5.00									
8	Theoretical (hour/week):	3.00									
9	Practice (hour/week):	0.00									
10	Laboratory (hour/week):	1									
11	Prerequisites:										
12	Language:	Turkish									
13	Mode of Delivery:	Face to f	ace								
14	Course Coordinator:	Öğr.Gör.	NÜKET ACARSOY								
15	Course Lecturers:	Öğr.Gör.	Ercan Yavuz								
16	Contact information of the Course Coordinator:	ismetguc Prg. Bşk	c@uludag.edu.tr, 02242942349, U.Ü. TBMYO Mekatronik . Görükle Bursa								
17	Website:										
18	Objective of the Course:	n this course, aimed to gain knowledge and skills for to set up AC circuits, to use solution methods of AC circuit, to calculate power and energy in AC circuits.									
19	Contribution of the Course to Professional Development:										
20	Learning Outcomes:										
		1	Being able to use of electric circuit elements in AC circuits								
		2	Being able to calculate of total reactance in AC circuits								
		3	Being able to calculate of current that is flowing in AC circuits.								
		4	Being able to calculate of node voltages in AC circuits.								
		5	Being able to calculate of powers that is consuming in AC circuits								
		6	Being able to do connection of three phase circuits								
		7	Being able to use of filters in AC circuits								
		8	Being able to use of rectifier circuits in AC circuits								
		9									
		10									
21	21 Course Content:										
\A/	Course Content:										
Week			Practice								
1											
2	angle	u pnase									
3	Calculation methods of reactance		Reactance measurements in different frequencies								
4	Method of mesh currents		Measurement of circulating current in multi-mesh circuits								

5	Methoo Methoo	ethod of mesh currents ethod of node-voltages									Measurement of node-voltages in multi-mesh circuits									
6	Norton	orton-equivalents of AC circuits									Measurement of current value of Norton-equivalent in multi-mesh circuits									
7	Thever	evenin-equivalents of AC circuits									Measurement of voltage value of Thevenin -equivalent in multi-mesh circuits									
8	Repea	peating courses, first midterm									Measurement of voltage value of Thevenin -equivalent in multi-mesh circuits									
9	Power	in s	ingle	phas	se circ	uits			Me	Measurement of power in single phase circuits										
10	Rectifie	er ci	rcuit	s					Se	Setting up circuits with thyristors and triacs										
11	Filters	ilters									Setting up filter circuits and investigation of input output signals									
12	Three	Three phase circuits									conne iges	ction ci	rcuit an	d mea	sureme	nt of cur	rents			
13	Repea	ing	cou	rses, s	secon	d midte	erm		De an	elta - Y id volta	conne iges	ction ci	rcuit an	d mea	sureme	nt of cur	rents			
14	Power	in tł	nree	phase	e circu	uits			Po	ower m	easure	ement w	vith wat	meter						
22	Textbooks, References and/or Other									Course Notes										
23	23 Assesment																			
TERM L	EARNIN	IG A	ACTI	VITIES	5		N F	NUMBE R	W	WEIGHT										
Midtern	n Exam						2	2	50	50.00										
Activites									Numb	ber		Dura	Duration (hour) Total Worl Load (hou							
										14			2.00	2.00 28.00						
Practicals/Labs										14			2.00	2.00 28.00						
Sattosian of the state of the s									T	14			2.00		28.00	28.00				
Homew	Homeworks									14			3.00			42.00				
Project Total	Projects									0.00			0.00	0.00			0.00			
Field S	Field Studies									0			0.00			0.00				
Middlere	Widter exams									2				8.00			16.00			
Others	Others										0				0.00					
Final E	Final Exams									1			8.00		8.00					
Total Work Load										150.00										
Total work load/ 30 hr										5.00										
ECTS Credit of the Course										5.00										
25	5 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																			
	PQ	1 P	Q2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16			
ÖK1	3	0		1	2	4	5	4	3	0	5	4	0	0	0	0	0			
ÖK2	0	0	)	2	2	4	5	4	3	0	4	5	0	0	0	0	0			
ÖK3	1	0	)	1	4	5	5	2	3	2	5	4	0	0	0	0	0			
ÖK4	0	1		1	2	3	5	3	2	1	4	5	0	0	0	0	0			

ÖK5	0	0	0	1	5	5	3	3	2	4	2	0	0	0	0	0
ÖK6	1	1	0	3	5	5	4	3	3	4	4	0	0	0	0	0
ÖK7	1	1	2	2	4	5	4	2	3	5	5	0	0	0	0	0
ÖK8	1	2	1	2	5	5	5	5	4	5	5	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very low ution Level:			2 low			3 Medium			4 High			5 Very High				