ANALOGUE ELECTRICS

1	Course Title:	ANALOGUE ELECTRICS
2	Course Code:	MKRZ104
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	2
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör. ERCAN YAVUZ
15	Course Lecturers:	Öğr.Gör. Ercan Yavuz
16	Contact information of the Course Coordinator:	ercanyz@uludag.edu.tr dahili (0224)2942365 B.U.Ü. TBMYO Mekatronik Prg. Görükle Bursa
17	Website:	
18	Objective of the Course:	In this course, aimed to gain knowledge and skills for to set up circuit using electronic circuit elements and troubleshooting.
19	Contribution of the Course to Professional Development:	The student can perform defined cellular design activities, easily produce mechatronic systems, perform maintenance, repair and revisions with what they have learned in the analog electronics course.
20	Learning Outcomes:	
	1	Being able to use semiconductor elements
	2	Being able to make connections of transistor circuits
	3	Being able to set up transistor circuit according to the different polarity methods.
	4	Being able to set up amplifier circuit with transistor.
	5	Being able to set up amplifier circuit with OPAMP.
	6	Being able to set up the adder and subtractor circuit with OPAMP.
	7	Being able to set up the derivative circuit with OPAMP.
	8	Being able to set up the integral circuit with OPAMP.
	9	
	10	
21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Definition of semiconductor	Introduction of laboratory
2	Methods of transistor polarity	Common emitter circuit
3	Methods of transistor polarity	Common base circuit
4	Methods of transistor polarity	Common collector circuit

5	Amplifiers with transistor	A class amplifier
6	OPAMP circuits	Inverting input amplifier
7	OPAMP circuits	Adder circuit with OPAMP
8	Repeating Courses First Midterm	Adder circuit with OPAMP
9	OPAMP circuits	Subtractor circuit with OPAMP
10	OPAMP circuits	Derivative and integral circuit with OPAMP
11	FETs and MOSFETs	FET circuit
12	FETs and MOSFETs	Power supply circuit
13	Repeating Courses Second Midterm	Power supply circuit
14	Oscillator circuits	Oscillator circuit with crystal

22	Textbooks, References and/or Other Materials:	Analog Elektronik (yayınlanmamış) ders notları
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	1.00	14.00
Homeworks	14	2.00	28.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	6.00	6.00
Others	0	0.00	0.00
Final Exams	1	10.00	10.00
Total Work Load			120.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

Total 100.00

Course the priciples of Bursa uludag University Associate and Undergraduate Education Regulation

24 ECTS / WORK LOAD TABLE

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**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	3	0	1	4	5	5	3	2	4	5	4	0	0	0	0	0
ÖK4	0	1	1	2	3	5	3	2	1	4	4	0	0	0	0	0

ÖK5	0	0	1	5	5	3	3	2	4	5	4	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	4	4	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**