COMPUTER AIDED CIRCUIT DESIGN

1	Course Title:	COMPUTER AIDED CIRCUIT DESIGN
2	Course Code:	MKRS227
3	Type of Course:	Optional
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör.Dr. İSMET GÜCÜYENER
15	Course Lecturers:	Ömer Nuri Çam
16	Contact information of the Course Coordinator:	ismetguc@uludag.edu.tr, 02242942349, U.Ü. TBMYO Mekatronik Prg. Bşk. Görükle Bursa
17	Website:	
18	Objective of the Course:	In this course, aimed to gain knowledge and skills for to draw analog and digital electronic circuits, to draw printed circuits and to make simulation.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	

	1	Being able to use of the drawing circuit program interface
	2	Being able to make schema with passive circuit elements
	3	Being able to measure current and voltage in circuit connections.
	4	Being able to set up circuits with programmable elements
	5	Being able to make simulations of circuits
	6	Being able to make a new library for the circuit elements
	7	Being able to make printed circuit
	8	Being able to make corrections on developed printed circuit
	9	
	10	

21	Course Content:	

Course Content:	

Week	Theoretical	Practice
1	Drawing program interface	
2	Circuits wit passive elements	
3	Setting up digital circuits	
4	Setting up analog circuits	
5	Measurements of voltage and current values	

6	Drawing printed circuit with manuel	
7	Drawing printed circuit using program module	
8	Repeating Courses First Midterm	
9	Corrections on printed circuits	
10	Setting up circuit with programmable elements	
11	Creating new printed circuit element template	
12	Creating new element library	
13	Repeating Courses Second Midterm	
14	Controls an printed circuits	

22	Textbooks, References and/or Other Materials:	Course Notes
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	2	50.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	50.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to		50.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Total	100.00		
Theoretical	14	2.00	28.00
Measurement and Evaluation Techniques Used in the			
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00

24 ECTS / WORK LOAD TABLE

Homeworks	2	3.00	6.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	2	8.00	16.00
Others	0	0.00	0.00
Final Exams	1	12.00	12.00
Total Work Load			90.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

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	4	2	4	5	0	0	0	0	0
ÖK2	0	0	2	2	3	5	4	3	0	5	4	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	4	0	0	0	0	0

ÖK5	0	0	0	1	5	5	3	2	1	4	4	0	0	0	0	0
ÖK6	5	5	0	3	5	5	4	2	3	4	4	0	0	0	0	0
ÖK7	1	1	2	2	4	4	4	1	2	5	5	0	0	0	0	0
ÖK8	1	2	1	2	5	5	5	5	4	4	5	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