

DC CIRCUIT ANALYSIS

1	Course Title:	DC CIRCUIT ANALYSIS	
2	Course Code:	EMEZ101	
3	Type of Course:	Compulsory	
4	Level of Course:	Short Cycle	
5	Year of Study:	1	
6	Semester:	1	
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:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Öğr.Gör. ALPER KEMAL YOLGEÇEN	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	alperkemal@uludag.edu.tr Öğr.Gör. Alper Kemal YOLGEÇEN	
17	Website:		
18	Objective of the Course:	To make the students learn the operation, process and rules of direct current circuit analysis	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	apply the basic principles about electrical current
		2	make basic circuit solutions
		3	make mixed circuit solutions
		4	
		5	
		6	
		7	
		8	
		9	
		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Resistance Ohm's Law		
2	Work, Power and Efficiency		
3	Kirchhoff's Laws		
4	Electrical Circuits		
5	Current and voltage supplies		
6	Circuit Solution Methods		
7	Mesh currents, Nodal analysis		

8	Circuit theories; Thevenin, Norton, Superposition Theorems	
9	Circuit theories; Thevenin, Norton, Superposition Theorems	
10	Circuit theories; Thevenin, Norton, Superposition Theorems	
11	Condensers; Electro Magnetic Induction Magnetism and Electro Magnetic Induction	
12	Transient Analysis in Direct Current	
13	Resistance-inductance, Resistance-condensate time	
14	Resistance-inductance, Resistance-condensate time constant	

22	Textbooks, References and/or Other Materials:	DC CIRCUIT ANALYSIS SEÇKİN YAYINCILIK Hasan Selçuk Selek Yayın Yılı: 2011 DA DEVRE ANALİZİ DERS NOTLARI, Alper Kemal YOLGEÇEN
----	---	---

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 Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24	ECTS / WORK LOAD TABLE
-----------	-------------------------------

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	2	14.00	28.00
Practicals/Labs	2	14.00	28.00
Self study and preperation	0	0.00	0.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	2	2.00	4.00
Others	0	0.00	0.00
Final Exams	1	1.00	1.00
Total Work Load			61.00
Total work load/ 30 hr			2.03
ECTS Credit of the Course			5.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS
-----------	--

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				