

Course Description Form

1. Course Name:					
Electronic Circuit Design II					
2. Course Code:					
CSE-C344					
3. Semester / Year:					
1 st Semester					
4. Description Preparation Date:					
14/2/2024					
5. Available Attendance Forms:					
Personal					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30/2					
7. Course administrator's name (mention all, if more than one name)					
Name: Prof. Dr. Muayad Sadik Croock Email: muayad.s.croock@uotechnology.edu.iq					
8. Course Objectives					
Course Objectives			<ul style="list-style-type: none"> Enable the student in the third stage of all disciplines to know the basic theoretical principles in how to design electronic circuits. Helping the student at this stage to understand the basic applications in designing electronic circuits. Detailed study, analysis and design of all theories related to electronic circuit designs based on the operational amplifier for integrated circuits. 		
9. Teaching and Learning Strategies					
Strategy		<ul style="list-style-type: none"> The working principles of the operational amplifier. Using them in terms of Oscillators, ADC and DAC, as well as Filters. Discusses the methods of analyzing these electronic circuits. 			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	A1	Oscillators 1	Live presentation and homework	Written exam
2	2	A2, B2	Oscillators 2	Live presentation and reports	Discussing and evaluating reports

3	2	A2,B2,C2	Oscillators 2	Live presentation and homework	Written exam
4	2	A2,B2,C2	Oscillators 3	Live presentation and reports	Discussing and evaluating reports
5	2	A2,B2,C2	Oscillators 3	Live presentation and reports	Discussing and evaluating reports
6	2	A2,B2,C2	Analog to digital converter and digital to analog converter	Live presentation and reports	Discussing and evaluating reports
7	2	A2,B2,C2	Analog to digital converter and digital to analog converter	Live presentation and homework	Written exam
8	2		Tutorial		
9	2		Exam		
10	2	A2,B2	Introduction to filters and Active Filters design	Live presentation and reports	Discussing and evaluating reports
11	2	A2,B2,C2	High order Active filter design	Live presentation and reports	Discussing and evaluating reports
12	2	A2, B2, C2	High order Active filter design	Live presentation and reports	Discussing and evaluating reports
13	2	A2, B2, C2	Driver circuit and power supply design	Live presentation and reports	Discussing and evaluating reports
14	2	A2,B2,C2	Driver circuit and power supply design	Live presentation and reports	Discussing and evaluating reports
15	2		Tutorial		
1	2		Exam		

11. Course Evaluation

20% documented exam
5% Quizzes
5% reports and homework

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	<ul style="list-style-type: none">• S. Electronic Devices and Circuit Theory (11th Edition) by Robert L. Boylestad and Louis Nashelsky, Pearson 2012.• The Art of Electronics by Paul Horowitz and Winfield Hill, Cambridge University Press; 3 edition 2015.• Applications and Design with Analog Integrated Circuits by Michael Jacob, PHI, 2nd Edn, 2006.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	