Republic of Iraq The Ministry of Higher Education & Scientific Research



University: University of

Technology

College: Control and Systems

Department: Stage: 4th Year

Lecturer name: Hazem I. Ali Academic Status: Assistant

Professor

Qualification: ph.D

Place of work: University of

Technology

Course weekly Outline

Course Instructor:	Assistant Professor Dr. Hazem I. Ali					
E_mail:	hazem.i.ali@uotechnology.edu.iq					
Title:	Computer Control					
Course Coordinator:						
Course Objective:	Students should acquire a fundamental understanding of					
	digital control systems and their design					
Course Description:	Introduction to real time computer control, Concepts of					
	computer control, Hardware requirements for real time					
	applications, Real time programming, Review of Z transform,					
	Sampled data control systems, Analysis of discrete control					
	systems, Stability analysis, Design of digital controllers					
Textbooks:	Digital control system analysis and design, L. Phillips and H.					
	Nagle					
References:	Discrete control systems, Ogata					
	Digital control of dynamic systems, F. Franklin, J. David Powel					
	Computer controlled systems: Theory and Design, Astrom					
Course Assessment:	The same of the sa	Laboratory	Quizzes	Project	Final Exam	
	As (20%)		As (10%)		As (70%)	
General Notes:						

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week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	15/9/2013	Introduction to Real		
2	22/9/2013	time Computer Control		
3	29/9/2013	Concepts of computer		
4	6/10/2013	Control		
5	13/10/2013	Hardware Requirements		
6	20/10/2013	For Real time		
7	27/10/2013	applications		
8	3/11/2013	Exam		
9	10/11/2013	Review of Z-Transform		
10	17/11/2013	Sampled data control		
11	24/11/2013	system		
12	1/12/2013			
13	8/12/2013	Review		
14	15/12/2013	Exam		
15				
16				
		Half-year Break		
17	9/2/2014	Analysis of discrete		
18	16/2/2014	Control		
19	23/2/2014	System		
20	2/3/2014			
21	9/3/2014	Stability		
22	16/3/2014	Analysis		
23	23/3/2014	Review		
24	6/4/2014	Exam		
25	13/4/2014	Design of Digital		
26	20/4/2014	controllers		
27	27/4/2014			A-
28	4/5/2014			
29	11/5/2014			
30				

Instructor Signature:

H. I. Ali

Dean Signature:

Ir. Azad Raheem