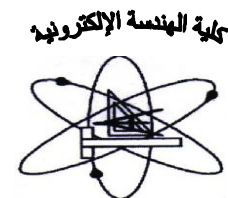


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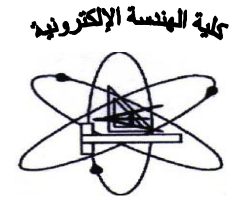
To view the reconstructed contents, please SCROLL DOWN to next page.



Course Syllabus

Department offering the program: Industrial electronics and Control Engineering
Department offering the course: Industrial electronics and Control Engineering

Course basic information :																							
Course Code: AC349	Course Title: Digital Control systems	Level : (3) Semester :2																					
Department requirement	Teaching hours: Lecture [3] Tutorial [2] - Lab [0]																						
Course objectives	<ol style="list-style-type: none">1. To acquire a good knowledge of the techniques for sampling theorem and signal analysis.2. To explain the different categories of digital controllers theory and design.3. To acquire a good knowledge of identification techniques for digital control systems.4. To prepare the different categories of adaptive control system techniques.																						
Course Contents	Signal analysis - Sampling theorem - Transfer function block diagram- Stability- Digital controller design - System identification - Self-tuning controller																						
Assessment																							
Weighting of Assessment	<table><tbody><tr><td>- Class tutorial and quizzes :</td><td>16</td><td>%</td></tr><tr><td>- Mid-term examination:</td><td>16</td><td>%</td></tr><tr><td>- Case study and/or practical exam:</td><td>.....</td><td>%</td></tr><tr><td>- Final – term examination:</td><td>68</td><td>%</td></tr><tr><td>- Other types of assessment:</td><td>.....</td><td>%</td></tr><tr><td colspan="2"></td><td><u> </u></td></tr><tr><td colspan="2"></td><td>Total 100 %</td></tr></tbody></table>		- Class tutorial and quizzes :	16	%	- Mid-term examination:	16	%	- Case study and/or practical exam:	%	- Final – term examination:	68	%	- Other types of assessment:	%			<u> </u>			Total 100 %
- Class tutorial and quizzes :	16	%																					
- Mid-term examination:	16	%																					
- Case study and/or practical exam:	%																					
- Final – term examination:	68	%																					
- Other types of assessment:	%																					
		<u> </u>																					
		Total 100 %																					
List of text books and references:																							
Text books	<ul style="list-style-type: none">• M. Sami Fadali and Antonio Visioli " Digital Control Engineering", Second Edition: Analysis and Design, Sep 20, 2012• C. L. Phillips, H. T. Nagle "Digital Control Systems Analysis and Design " Third Edition, Prentice –Hall Inc.																						



	<p>1998.</p> <ul style="list-style-type: none">• K. Ogata, “Discrete Time Control Systems “, Prentice-Hall, Inc, Upper Saddle River, Nj, 2nd ed., 1995.
Recommended books	<ul style="list-style-type: none">• K. M. Moudglya, “Digital Control”, John Wiley & Sons, Ltd. 2007.• G. F. Franklin, J.D. Powell and M. Workman “ Digital control Dynamic Systems”, Addison Wesley Longman, Menlo Parc, CA, 3rd ed., 1998.• Landau, Ioan Doré, Zito, Gianluca, “Digital Control Systems, Design, Identification and Implementation” 2006.

