

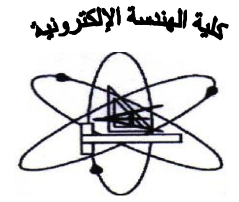
Course Syllabus

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

Course basic information :																							
Course Code: AC443	Course Title: Real Time Control Systems	Level :(4) Semester : 1																					
Department requirement	Teaching hours: Lecture [3] Tutorial [2] - Lab [0]																						
Course objectives	<ol style="list-style-type: none">1. Explaining real time control systems2. To provide students with the hardware and software requirements to implement real time control systems3. To demonstrate real time control systems programming4. To study the principles of embedded real time operating systems.																						
Course Contents	Introduction to Real Time Systems. Types of real time systems. Sequential and supervisory control- Software requirements. Real time operating systems-Embedded real time operating system-Hardware requirements-Types of interfacing. Direct digital control systems-Designing real time control systems-Case study.																						
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></td><td><hr/></td><td></td></tr><tr><td></td><td>Total</td><td>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:	%		<hr/>			Total	100 %
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- Final – term examination:	68	%																					
- Other types of assessment:	%																					
	<hr/>																						
	Total	100 %																					
List of text books and references:																							
Text books	<ul style="list-style-type: none">• Rob Williams, “<i>Real Time Systems Developments</i>“, Prentice Hall, 2006.• Hermann Kopetz, “<i>Real Time Systems Design Principles for Distributed Embedded Applications</i>”, Prentice Hall, 2006.																						



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قسم هندسة الالكترونيات الصناعية والتحكم



Recommended books	<ul style="list-style-type: none">• S. Varada Rajan, <u>Embedded Real Time Systems</u>, Modern Media 2014

