



**UNIVERSITI KUALA LUMPUR**  
MALAYSIAN SPANISH INSTITUTE

(The contents and other related details in this form is used for publication purpose only. Training module will be given to participants upon registration)

<b>Course Title: MATLAB/Simulink FOR PROCESSOR IN LOOP</b>		<b>Course Code : EEA 163</b>
<b>Course Background/Summary :</b> Matlab/Simulink has been widely used in Engineering research environment due to the ability of the software for complex computation in several engineering fields, This course will introduce participants on how make use of MATLAB/Simulink for processor in loop (PIL) application. In processor in Loop the controller lies in real time (hardware) but the system/Process is in Matlab/Simulink (software). Communication protocol will be used and PIC microcontroller will be the interface. The study system will be speed, position, and level.		
<b>Course Objectives:</b> <ul style="list-style-type: none"><li>• Construct interface circuit using PIC microcontroller.</li><li>• Write C code for communication to transfer input, output data signals from MATLAB/ Simulink to interface and vice versa.</li><li>• Control the speed, position, level and temperature using PIL technique.</li></ul>		
<b>Target Audience:</b> <ul style="list-style-type: none"><li>• Electricians, Research assistant, research officer, Researcher, Academicians</li><li>• Technicians, Hobbyist</li><li>• Engineers &amp; Instructors</li></ul>		
<b>Course duration :</b>	<b>Min:3 days, Max:5 days</b>	
<b>Course Contents :</b>		
<b>No</b>	<b>TOPICS</b>	
1	Basic knowledge about MATLAB/Simulink and PIL	
2	Theory of Control System	
3	Construct interface circuit using PIC microcontroller.	
4	Control speed, position, level system with aid of PIL system.	
<b>COURSE STRUCTURE:</b>		
Practical :	65 %	
Theory :	35 %	

UniKL MSI can also customize existing short courses and develop new courses to meet your personal training needs and requirements. The course duration serves as a guideline for your reference.

Please forward enquiries to Centre for Advancement & Continuing Education (ACE), University Kuala Lumpur (Malaysian Spanish Institute), Kulim Hi-Tech Park, 09000 Kulim, Kedah or via fax to:04-4032539 or email to [syazrah@unikl.edu.my](mailto:syazrah@unikl.edu.my) or call 04-4035199 / 200 (ext:112 / 185)