



**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: MICROPROCESSOR FOR INDUSTRIAL APPLICATION</b>		<b>Course Code</b> :	<b>EEA 109</b>
<b>Course Background/Summary :</b>			
This course will provide participants with knowledge about Microprocessor, and the associated devices such as I/Os, memories, RAM, ROM etc. They will be exposed to programming, wiring connectivity, monitoring and measuring I/O signals and troubleshoot the errors encountered with electrical wiring or programming.			
<b>Course Objectives:</b>			
<ul style="list-style-type: none"> <li>• Describe functionality of Microprocessor circuits and their associated peripherals, and interpret their programming and give a description about their operation.</li> <li>• Familiarize with Intel 8085</li> <li>• Interpret, define and analyze the existing program and describe the expected input, output of Micro Processor</li> </ul>			
<b>Target Audience:</b>			
<ul style="list-style-type: none"> <li>• Industrial workers from operators, technicians to engineers</li> <li>• Teaching staffs/instructors</li> </ul>			
<b>Course Duration</b> :		<b>Min:3 days, Max:5 days</b>	
<b>Course Contents</b> :			
No	TOPICS		
1	Introduction to Microprocessor <ul style="list-style-type: none"> <li>• What is Microprocessor, why Microprocessor, Types of Microprocessor</li> <li>• Electrical wiring to and from Microprocessor</li> </ul>		
2	Basic Programming Technique <ul style="list-style-type: none"> <li>• Initializations programming</li> <li>• Read Registers, Write and Load to Registers</li> <li>• Basic Mathematical Add, Subtract with registers</li> <li>• I/O declarations</li> <li>• Programming "And" , "Or" , "NOR " functions and their combination</li> </ul>		

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)



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3	<ul style="list-style-type: none"> <li>• Data and I/O Manipulation technique</li> <li>• Jump, compare and Call</li> <li>• Delay On and delay off Timer</li> <li>• Sequence and Loop Programming</li> </ul>
4	<p>Analog Systems Programming</p> <ul style="list-style-type: none"> <li>• Square wave generation</li> <li>• Triangular wave generation</li> </ul>
	<p>Learning Project Microprocessor controls</p> <ul style="list-style-type: none"> <li>• Basic Traffic Light (4 junctions).</li> <li>• Pneumatic System</li> <li>• Robocon Programming,</li> <li>• Analog programming with water level, speed control</li> </ul>
<b>COURSE STRUCTURE:</b>	
Practical :	70%
Theory / Lab Works :	30%

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