

## Short-term Intensive Course on Electrical Construction, Device technology, Simulation, Debugging, Programming

The aim of the course is to transfer modern and practice-oriented skills of mechatronics system. Participants learn the analysis of electronics device technology knowledge. In possession of these concepts the programming with LabVIEW and the simulation of the basic electrical circuit. Based on its experience the next course deals with the general concepts of sensors, and small robot control. In the courses implepractical circuit design and constructions skills can be learned. The project ends with pneumatic, electropneumatic, Programmable Logic Controller (PLC) practical training, which are devices used to control in the industry.

### Week 1

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
1	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
2	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
3	Device technology	LabVIEW programming	LEGO Mindstorms robot programming	Printed circuit design	PLC programming
4					
5					
6	Electrotechnics and Electronics	Measure basics of sensors	Machine diagnostics	Pneumatics and electro pneumatics	PLC programming
7					
8					

### Week 2

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
1	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
2	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
3	Device technology	LabVIEW programming	LEGO Mindstorms robot programming	Printed circuit design	PLC programming
4					
5					

6					
7	Electrotechnics	and	Measure basics of sensors	Machine diagnostics	Pneumatics and electro pneumatics
8	Electronics				PLC programming

Week 3

	Monday	Tuesday	Wednesday	Thursday	Friday
1	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
2	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
3			LEGO Mindstorms robot programming		
4	Device technology	LabVIEW programming		Printed circuit design	PLC programming
5					
6				Pneumatics and electro pneumatics	PLC programming
7	Electrotechnics	and	Measure basics of sensors	Machine diagnostics	
8	Electronics				

Week 4

	Monday	Tuesday	Wednesday	Thursday	Friday
1	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
2	Subject specific English	Subject specific English	Subject specific English	Subject specific English	Subject specific English
3			LEGO Mindstorms robot programming		
4	Device technology	LabVIEW programming		Printed circuit design	PLC programming
5					
6				Pneumatics and electro pneumatics	PLC programming
7	Electrotechnics	and	Measure basics of sensors	Machine diagnostics	
8	Electronics				

Please note that this is only a sample schedule. Subjects can be changed and further subjects can be added according to the needs of the applicants.

For further information please contact:

Mr. Zsolt Tiba, Head of International Office,  
Faculty of Engineering, University of Debrecen  
H-4028 Debrecen, Ótemető utca 2-4.  
E-mail: [tiba@eng.unideb.hu](mailto:tiba@eng.unideb.hu)