## **Schedule Power Electronics**

1st week		
Monday 20/07	- Opening ceremony - Cultural class. Lesson 1	<ul> <li>Introduction. Microcontroller architecture.</li> <li>The inputs and outputs of a microcontroller.</li> <li>Signal types.</li> <li>Microcontroller programming. Automatic code generation: a modern approach to developing FPGA systems.</li> </ul>
Tuesday 21/07	- Cultural class. Lesson 2 - Online bar	<ul><li>Signal processing.</li><li>Sensors. Communication with Microcontroller.</li></ul>
Wednesday 22/07	- Campus tour	<ul> <li>Generation of PWM signal using Microcontroller</li> <li>Design of an automatic control system (Independent work).</li> </ul>
Thursday 23/07	- Cultural class. Lesson 3	<ul><li>Design of an automatic control system (Independent work).</li><li>Project Consulting (Feedback mode).</li></ul>
Friday 24/07	- Cultural class. Lesson 4 - Live chat	<ul> <li>- Modification of the automatic control system (Independent work).</li> <li>- PI&amp;PID controllers. Design of closed-loop control systems.</li> </ul>
Saturday 25/07	- White Nights Report	

Sunday 26/07	- Cultural class.		
	Lesson 5		
	- Live chat		
2nd week			
Monday 27/07	- Cultural class.	- PI&PID controllers. Design of closed-loop	
	Lesson 6	control systems.	
	- Online cooking	- Stability of control system. Closed-loop	
		control setup	
Tuesday 28/07	- Sport online	- Code Generation and Project Launch	
		(Independent work & Feedback mode).	
Wednesday	- Cultural class.	- Introduction to MATLAB/Simulink	
29/07	Lesson 7		
29/07	Lesson /	- MATLAB/Simulink Support Package for	
	- Live chat	Microcontrollers. Project development.	
Thursday 30/07	- Cultural class.	- Code generation in MATLAB/Simulink.	
	Lesson 8	External connection of Microcontrollon with	
	Т	- External connection of Microcontroller with	
	- Team game	Simulink.	
Friday 31/07	- Cultural class.	- Project implementation in Simulink	
	Lesson 9	(Feedback mode).	
	- Closing Ceremony		
Saturday 01/08	- White Nights		
	Report		
	(+drawbridges and		
	photo diary)		