

<b>Name:</b> <b>High Availability Embedded Systems</b>		<b>NEPTUN-code:</b> <i>NIXMI1EMNE</i>	<b>Number of periods/week:</b> full-time: 2 lec + 0 sem + 1 lab
<b>Credit:</b> 4 <b>Requirement:</b> mid-term mark		<b>Prerequisite:</b> -	
<b>Responsible:</b> András MOLNÁR, Ph.D.	<b>Position:</b> associate professor, habil.	<b>Faculty and Institute name:</b> John von Neumann Faculty of Informatics Institute of Applied Informatics	
<b>Way of assessment:</b> - mid-term exam - oral exam			
<b>Competences</b>			
<b>Course description:</b>			
During the course, the students will get knowledge about the theoretical and practical problems of highly reliable embedded systems and the possible solutions of these problems. Through the evolution of microcontrollers, the known architectures, controller peripheries, communication possibilities and other typical properties will be explained on the theoretical course. The hardware and software redundancy is a highlighted field on this course.			
<b>Literature</b>			
István Dr. Ajtonyi, István Dr. Gyuricza: Programmable Control Devices, Networks and Systems, Digitális Tankönyvtár, 2010 (in Hungarian) Meikang Qiu, Jiayin Li Real-Time Embedded Systems: Optimization, Synthesis, and Networking, CRC Press, 2011			