

**PROPUNERI DE TEME PENTRU LUCRAREA DE DIZERTATIE**  
**Master EMBEDDED SYSTEMS**

Promotia 2014-2015

Nr. crt.	Coordonator	Titlul temei
1.	Prof.dr.ing. Lucian VINTAN	Systems-on-Chip Automatic Multi-Objective Optimization
1.	Prof.dr.ing. Daniel VOLOVICI	Recurrent Neural Networks
2.		Time Series Statistical Data Analysis
3.	Prof.dr.ing. Ioan P. MIHU	Creșterea vitezei de procesare folosind calculele în virgulă fixă
4.	Prof.dr.ing. Ioan P. MIHU	Creșterea vitezei de procesare folosind procesoare numerice de semnal Microchip
5.	Conf.dr.ing. Ioan Z. MIHU	Design, test and optimization of embedded applications on C166 hardware platform
6.		Design of a real time kernel for 16 bit microcontrollers of C166 family
7.		Networking in automotive
8.	Conf.dr.ing. C-tin BĂLĂ-ZAMFIRESCU	Simulation and optimization of manufacturing control systems (FESTO line)
9.		Cyber-Physical Systems (demo)
10.	Conf. dr. ing. Remus BRAD	Network simulation for traffic optimization
11.	Conf.dr.ing. Macarie BREAZU	Remote controlled robot
12.		Application with Raspberry Pi
13.	Conf.dr.ing. Cornel RENTEA	Function Block Diagram Programming for Communication Module- Programmable Logic Controller MODBUS Configuration. Examples with Application and Experiment Prototyping
14.		Network modules for Ethernet with direct connection microcontrollers-PLC FX-Melsec. Practical application for positioning system
15.	Conf. dr. ing. Dorin SIMA	Embedded Systems Programming <a href="http://www.embeddedrelated.com/blogs-1/nf/all/Tutorials.php">http://www.embeddedrelated.com/blogs-1/nf/all/Tutorials.php</a>
16.		Web of Things with Sun SPOTS <a href="http://sunspotworld.com/S314730_Sun_SPOTS_Web_Of_Things/index.html">http://sunspotworld.com/S314730_Sun_SPOTS_Web_Of_Things/index.html</a>
17.		Software Engineering for Embedded Systems <a href="http://www.sciencedirect.com/science/book/9780124159174">http://www.sciencedirect.com/science/book/9780124159174</a>
18.		Embedded Systems Development using SysML. <a href="http://www.sparxsystems.com.au/downloads/ebooks/Embedded_Systems_Development_using_SysML.pdf/">http://www.sparxsystems.com.au/downloads/ebooks/Embedded_Systems_Development_using_SysML.pdf/</a>
19.	Conf.dr. ing. Daniel MORARIU	Simulation the scheduling algorithms in a microcontroller with RTOS
20.		Patter recognition using neural networks implemented into microcontroller
21.	S.l.ing. Horia CAPRITA	Protocole avansate de comunicatii in retelele automotive. Studiu de caz. Coordonator propus: Conf.dr.ing. Ioan Z. MIHU
22.		Arhitecturi de microcontroller-e multicore. Aplicatie demonstrativa. Coordonator propus: Conf.dr.ing. Ioan Z. MIHU
23.		Modelarea, simularea si generarea aplicatiilor embedded utilizand Matlab. Coordonator propus: Conf.dr.ing. Ioan Z. MIHU
24.		Generatoare de cod C (plugets) care utilizeaza informatii conforme cu standardul Autosar. Coordonator propus: Conf.dr.ing. Ioan Z. MIHU
25.	S.l. dr. ing. Arpad GELLERT	Loads management based on photovoltaics and energy storage system

Director Departament,  
prof.dr.ing. Daniel VOLOVICI

Responsabil diplome,  
conf.dr.ing. Remus BRAD