Transilvania University of Braşov, Romania

Study program: Electronic and Communication Integrated Systems

Faculty:	Electrical Engineering and Computer Science
Study period:	2 years (master)
Academic year structure:	2 semesters (14 weeks per semester)
Examination sessions (two):	winter session (January/February) summer session (June/July)

Courses per years (C= course; S = seminar; L = laboratory; P = project)

1st Year

No. crt.	Course	Code	1st Semester					2nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Software technologies for systems testing	SECI101	1	-	-	2	6					
02	Distributed and real-time systems	SECI102	2	-	-	2	6					
03	Packet processors	SECI103	2	-	-	-	6					
04	Data communications	SECI104	1	-	2	1	6					
05	Ethics and academic integrity	SECI105	1	-	-	-	4					
06	Research (practice)	SECI106	-	-	-	-	2					
Thoroughgoing Study Direction: Digital communication networks												
07	Digital signal processors	SECI207						2	-	-	1	6
08	Industrial control and data transmission networks	SECI208						1	-	-	2	6
09	Quality of Services and computer networks security	SECI209						1	-	-	2	6
10	Research (practice)	SECI210						-	-	-	-	2
One discipline is chosen from each package												
Optional package no. 1												
11	Communication networks modelling	SECI211						1	-	-	1	4
	Protocols for interconnecting hybrid networks	SECI212										
Optional package no. 2												
12	Physical layer of communication networks and switching techniques	SECI213						2	-	-	1	6
	Smart antennas for mobile communications systems	SECI214										
Thoroughgoing Study Direction: Embedded systems												
13	Research (practice)	SECI215						-	-	-	-	2
One discipline is chosen from each package												
Optional package no. 1												
14	Modern architectures of processors and microcontrollers	SECI216						1	-	-	2	6
	Hardware Description Languages	SECI217										
Optional package no. 2												

15	Analog interfacing and conditioning systems	SECI218						1	-	-	2	6
	Network on Chip	SECI219										
Optional package no. 3												
16	Industrial control and data transmission networks	SECI220						1	-	-	1	5
	VLSI testing technologies and reliability	SECI221										
Optional package no. 4												
17	Interfacing standards for embedded systems	SECI222						2	-	-	1	5
	Systems on chip security	SECI223										
	Programmable logic systems	SECI224										
Optional package no. 5												
18	Microcontroller and DSP programming	SECI225						2	-	-	1	6
	Neural networks	SECI226										

2nd Year

No. crt.	Course	Code	3rd Semester					4th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
Thoroughgoing Study Direction: Digital communication networks												
1	Intelligent communication networks	SECI301	1	-	-	2	5					
2	Mobile communications and mobile computing	SECI302	2	-	1	1	7					
3	Research (practice)	SECI303	-	-	-	-	6					
One discipline is chosen from each package												
Optional package no. 1												
4	Distributed databases for telecommunications	SECI304	1	-	1	1	6					
	Radio channel modelling	SECI305										
Optional package no. 2												
5	Design and testing of digital communication networks	SECI306	2	-	1	1	6					
	Multimedia streams in IP networks	SECI307										
Thoroughgoing Study Direction: Embedded systems												
6	Research (practice)	SECI308	-	-	-	-	6					
One discipline is chosen from each package												
Optional package no. 1												
7	Systems remote control	SECI309	1	-	1	1	6					
	Virtual instrumentation in embedded systems	SECI310										
Optional package no. 2												
8	Industrial and consumer microcontroller-based applications	SECI311	1	-	-	2	6					
	ASIC design	SECI312										
Optional package no. 3												
9	Low-power intelligent sensor networks	SECI313	2	-	1	1	6					
	Energy management of embedded electronics and communications systems	SECI314										
Optional package no. 4												
10	Applications in telecommunications, domotics and medical electronics	SECI315	2	-	-	2	6					
	Automotive control systems	SECI316										
	Computer-aided design in electronics EDA	SECI317										

All directions												
11	Research Projects Management	SECI401	1	-	-	1	4					
12	Research (practice)	SECI402	-	-	-	-	10					
13	Practice for master thesis preparing	SECI403	-	-	-	-	10					
14	Preparing the master thesis	SECI404	-	-	-	-	6					