Transilvania University of Braşov, Romania

Study program: Computers

Faculty: Electrical Engineering and Computer Science
Study period: 4 years (bachelor)
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.	Course	Code	1st Semester					2nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Communication Skills	CALC101	1	2	-	-	3					
2.	Using Computers and Internet Services	CALC102	1	-	2	-	4					
3.	Mathematical Analysis	CALC103	3	2	-	-	6					
4.	Linear Algebra, Analytical and Differential Geometry	CALC104	3	2	-	-	6					
5.	Computer Programming and Programming Languages I	CALC105	3	-	3	-	6					
6.	Computer-Assisted Graphics	CALC106	1	-	2	-	3					
7.	English Language I	CALC107	1	1	-	-	2					
8.	Special Mathematics	CALC108						3	2	-	-	6
9.	Electrotechnics	CALC109						4	2	-	-	6
10.	Probability Theory and Mathematical Statistics	CALC210						2	1	-	-	4
11.	Physics	CALC211						3	2	1	-	6
12.	Computer Programming and Programming Languages II	CALC212						2	-	3	1	6
13.	English Language II	CALC213						1	1	-	-	2
14.	Physical Training I	CALC114	-	1	-	-	1					
15.	Physical Training II	CALC215						-	1	-	-	1

2nd Year

No.	Course	Code	3rd Semester					4th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	System Theory	CALC301	3	2	-	-	5					
2.	Electronic Measurements	CALC302	1	-	3	-	5					
3.	Electronic Devices and Circuits I	CALC303	3	2	-	-	5					
4.	Data Structures	CALC304	2	-	3	-	6					
5.	Signal Processing	CALC305	3	2	2	-	7					
6.	English Language III	CALC306	1	1	-	-	2					

7.	Formal Languages and Compilers	CALC407						2	-	1	-	3
8.	Digital Electronics	CALC408						4	1	2	-	6
9.	Analog Electronics	CALC409						2	-	2	1	4
10.	Fundamentals of Communication	CALC410						2	-	2	-	4
11.	Algorithms' Design	CALC411						3	-	2	-	5
12.	English Language IV	CALC412						1	1	-	-	2
13.	Practical Placement	CALC413						90				4
14.	Physical Training III	CALC314	-	1	-	-	1					
15.	Physical Training IV	CALC415						-	1	-	-	1

3rd Year

No.	Course	Code	5th Semester					6th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Microprocessors' Architecure	CALC501	4	2	2	-	7					
2.	Database	CALC502	2	-	2	-	4					
3.	Digital Circuits Project	CALC503	-	-	-	1	2					
4.	Artificial Intelligence	CALC504	3	-	2	-	6					
5.	Electronic Instrumentation	CALC505	2	-	2	-	6					
6.	Sensors and Transducers	CALC506										
7.	Electronic Materials and Technologies	CALC507	2	-	2	-	4					
8.	Computer aided Design for Electronic devices	CALC508										
9.	Logical and Functional Programming	CALC509						3	-	2	-	4
10.	Hardware Description Languages	CALC610						1	-	2	1	4
11.	Computer Architecture and Organization	CALC611						3	-	2	-	5
12.	Operating Systems	CALC612						3	-	2	-	4
13.	Programming Techniques	CALC613						2	-	2	-	5
14.	Sensor Networks	CALC614										
15.	Human Computer Interfaces Design	CALC615						2	-	2	-	4
16.	Multimedia Technologies	CALC616										
17.	Web Programming	CALC617										
18.	Practical Placement	CALC618						90				4

4th Year

No.	Course	Code	7 th Semester					8th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Embedded Systems	CALC701	3	-	2	1	7					
2.	Memory and Peripherals	CALC702	4	-	2	-	7					
3.	Data Transmission and Computer Networks I	CALC703	2	-	2	-	5					
4.	Computer Architecture and Organization Project	CALC704	-	-	-	2	3					
5.	Image Processing and Analysis	CALC705	2	-	2	-	4					
6.	Communication Protocols	CALC706										

7.	Software Engineering	CALC707	2	-	2	-	4					
8.	Parallel Algorithms and Architectures	CALC708										
9.	VLSI Design	CALC 809						3	-	2	-	4
10.	Testing and Reliability of Computer Systems	CALC810						2	-	2	-	4
11.	Data Transmission and Computer Networks II	CALC.811						2	-	2	-	4
12.	Mobile Computing	CALC812						2	-	2	-	3
13.	Protection and Security in Computing	CALC813										
14.	Human Machine Interface	CALC814						2	-	2	-	3
15.	Scripting Languages	CALC815										
16.	Entrepreneurship	CALC816						2	1	-	-	2
17.	Computer System Project	CALC817						-	-	-	3	6
18.	Practical Activity for Diploma Thesis Elaboration	CALC818						60				4