

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. crt.	Course	Code	1 st Semester					2 nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Communication Skills	CALC101	1	2	-	-	3					
02	Using Computers and Internet Services	CALC102	1	-	2	-	4					
03	Mathematical Analysis	CALC103	3	2	-	-	6					
04	Linear Algebra, Analytical and Differential Geometry	CALC104	3	2	-	-	6					
05	Computers Programming and Programming Languages	CALC105	3	-	3	-	6					
06	Computer Assisted Graphics	CALC106	1	-	2	-	3					
07	English Language. I	LE01	1	1	-	-	2					
08	Physical Training I	EF01	-	1	-	-	1					
09	Special Mathematics	CALC209						3	2	-	-	8
10	Electrotechnics	CALC210						4	2	-	-	6
11	Theory of Probabilities and Mathematical Statistics	CALC211						2	1	-	-	5
12	Physics	CALC212						3	2	1	-	6
13	Computer Programming and Programming Languages II	CALC213						2	-	3	1	6
14	English Language. II	LE02						1	1	-	-	2
15	Physical Training II	EF02						-	1	-	-	1

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	System Theory	CALC301	3	2	-	-	6					
02	Electronic Measurements	CALC302	1	-	3	-	5					
03	Electronic Devices and Circuits I	CALC303	3	1	-	-	5					
04	Data Structures and algorithms	CALC304	2	-	3	-	6					
05	Signal Processing	CALC305	3	-	2	-	6					
06	English Language III	LE03	1	1	-	-	2					
06	Physical Training III	EF03	-	1	-	-	1					
07	Formal Languages and Compilers	CALC408						2	-	2	-	4
08	Digital Electronics	CALC409						4	-	2	-	6
09	Analog Electronics	CALC410						2	-	2	1	5
10	Fundamentals of Communication	CALC411						2	-	2	-	4
11	Algorithms' Design	CALC412						3	-	2	-	5

12	English Language IV	LE04						1	1	-	-	2
13	Physical Training IV	EF04						-	1	-	-	1
14	Practical Placement	CALC413						90 hours				4

3th Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Microprocessors' Architecture	CALC501	4	2	2	-	7					
02	Database	CALC502	2	-	2	-	5					
03	Digital Circuits Project	CALC503	-	-	-	2	2					
04	Artificial Intelligence	CALC504	2	-	2	-	6					
05	Electronic Instrumentation	CALC505	2	-	2	-	6					
06	Sensors and Transducers	CALC506										
07	Electronic Materials and Technology	CALC507	2	-	2	-	4					
08	Computer aided Design for Electronic devices	CALC508										
09	Logical and Functional Programming	CALC609						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	Design of Human Computer Interfaces	CALC615						2	-	2	-	4
16	Multimedia Technologies	CALC616										
17	Web Programming	CALC617										
18	Practical Placement	CALC618						90 hours				4

4th Year

No. crt.	Course	Code	7 th Semester					8 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Embedded Systems	CALC701	3	-	2	1	7					
02	Memory and Peripherals	CALC702	4	-	2	-	7					
03	Data Transmission and Computer Networks I	CALC703	2	-	2	-	5					
04	Computer Architecture and Organization Project	CALC704	-	-	-	2	3					
05	Image Processing	CALC705	2	-	2	-	4					
06	Communication Protocols and Interfaces	CALC706										
07	Software Engineering	CALC707	2	-	2	-	4					
08	Parallel Algorithms and Architectures	CALC708										
09	VLSI Design	CALC809						3	-	2	-	5
10	Testing and Reliability of Computer Systems	CALC810						2	-	2	-	4
11	Communication Systems	CALC811						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	Elaboration of the Diploma Project	CALC817						-	-	-	4	4
18	Practical Activity for Diploma Work	CALC818						90 hours				5