

Transilvania University of Braşov, Romania

Study program: Computers

Faculty	Faculty of Electrical Engineering and Computer Science
Study program	Computers
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	1 st Semester					2 nd Semester				
		C	S	L	P	Cred	C	S	L	P	Cred
01	Communication Skills	1	2	-	-	3					
02	Mathematical Analysis	3	2	-	-	6					
03	Linear Algebra, Analytical and Differential Geometry	3	2	-	-	6					
04	Applied Informatics I	1	-	2	-	4					
05	Computers Programming and Programming Languages I	3	-	3	-	6					
06	Computer Assisted Graphics	1	-	2	-	3					
07	English Language. I	1	1	-	-	2					
08	Physical Training I	-	1	-	-	1					
09	Special Mathematics						3	2	-	-	6
10	Electrotechnics						4	2	-	-	6
11	Theory of Probabilities and Mathematical Statistics						2	1	-	-	4
12	Physics						3	2	1	-	6
13	Computer Programming and Programming Languages II						2	-	2	1	6
14	English Language. II						1	1	-	-	2
15	Physical Training II						-	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	CALC303	3	1	-	-	5					
04	Data Structures and algorithms	CALC304	2	-	3	-	6					
05	Signal Processing	CALC305	3	-	2	-	6					
06	English Language III	CALC306	1	1	-	-	2					
06	Physical Training III	CALC307	-	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	CALC413							1	1	-	-	2
13	Physical Training IV	CALC415							-	1	-	-	1
14	Practical Placement	CALC414							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	3	-	2	-	6						
05	Electronic Instrumentation	CALC505	2	-	2	-	6						
06	Sensors and Transducers	CALC506											
07	Interconnection Technologies in Electronics	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	Tools for program development	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	I/O Systems and Peripherals	CALC702	4	-	2	-	7						
03	Computer Networks	CALC703	2	-	2	-	5						
04	Computer Architecture and Organization Project	CALC704	-	-	-	2	3						
05	Image Processing	CALC705	2	-	2	-	4						
06	Communication Protocols	CALC706											
07	Software Engineering	CALC707	2	-	2	-	4						
08	Parallel and Distributed Algorithms	CALC708											
09	VLSI Design	CALC809						3	-	2	-	5	
10	Testing Computer Systems	CALC810						2	-	2	-	4	
11	Communication Systems	CALC811						2	-	2	-	4	
12	Mobile Computing	CALC812						2	-	2	-	3	
13	Data Security	CALC813											
14	Human Machine Interface	CALC814						2	-	2	-	3	
15	Scripting Languages	CALC815											
16	General Economy	CALC816						2	1	-	-	2	
17	Elaboration of Diploma Project	CALC817						-	-	-	2	4	
18	Practical Activity for Diploma Work	CALC818						90 hours				5	