

Transilvania University of Braşov, Romania

Study program: Electrical Engineering and Computers (in English)

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)

1st Year

No. crt.	Course	1 st Semester					2 nd Semester				
		C	S	L	P	Cred	C	S	L	P	Cred
01	Math.Analysys	3	2			6					
02	Linear Algebra and Analytic Geometry	2	2			5					
03	Applied computer science	2	1			3					
04	Professional communication	2	1			3					
05	Physics	2	1	2		6					
06	Computer Programming and Programming Languages I	2		2		5					
07	German language I	1	1			2					
08	Physical Training I		1			1					
09	Web programming						2		2	1	6
10	Computer assisted graphics						2		2		4
11	Special Mathematics						3	3			7
12	Computer Programming and Programming Languages II						2		3		6
13	Computer Programming and Programming Languages III						2		2		5
14	German language II						1	1			2
15	Physical Training I							1			1

2nd Year

No. crt.	Course	3 rd Semester					4 th Semester				
		C	S	L	P	Cred	C	S	L	P	Cred
01	Math. Fundamentals of Computers	2	2			5					
02	Computer Programming and Programming Languages III	2		3		6					
03	Electric and electronic Measurements	2		2		4					
04	System Theory	3	2			6					
05	Electromagnetic Field Theory	3	3	1		7					
06	Modern laguages (French) III	1	1			2					
07	Physical Training III		1			1					
08	Energy sources						2	1	2		4

09	Analog electronics						3	2	1		5
10	Computer Programming and Programming Languages IV						1		2	1	4
11	Electrical Circuits Theory						3	3			7
12	Electrotechnical Materials						2		2		4
13	Modern languages (French) IV						1	1			2
14	Physical Training IV							1			1
15	Practice in the field										4

3rd Year

No. crt.	Course	5 th Semester					6 th Semester				
		C	S	L	P	Cred	C	S	L	P	Cred
01	Switchgear equipments	3		3		6					
02	Static converters	2		2		5					
03	Electrical machines I	2		2	1	5					
04	Analog Integrated Circuits	2	1	1		5					
05	Data Bases	1		2		3					
06	Digital Signal Processing						2		2		4
07	Data Acquisition						2		2	1	4
08	Microcontrollers						2		2		4
09	Electrical machines II						2		2		4
10	Digital Electronics						2		2		4
11	Specialized practice										4
A3 Optional courses (2 courses out of 4 are chosen)											
12 13	Industrial automation	2		1		3					
	Virtual instrumentation I	+		+		+					
	Microsensors and actuators	2		1		3					
	Computer Interfaces and Peripherals										
B3 Optional courses (2 courses out of 4 are chosen)											
14 15	Computer architecture						2 + 2		1 + 1		3 + 3
	Virtual instrumentation II										
	Electrical equipment monitoring and diagnosis										
	Electrical and electronic equipment for automotive I										

4th Year

No. crt.	Course	7 th Semester					8 th Semester				
		C	S	L	P	Cred	C	S	L	P	Cred
01	Electrical Drives	2	1	2		5					
02	Computer Interfaces and Peripherals	2		2		4					
03	Electrical Installations	2		1	1	4					
04	Electromagnetic compatibility	2		3		5					
05	Computer Networks	2			2	4					
06	Management						2			2	5

07	Industrial Control						3		3		6
08	Data Transmission & Protocols						2		2		5
9	Practical for diploma project elaboration										4
10	Diploma project elaboration										6
A4 Optional courses (2 courses out of 4 are chosen)											
11 12	Power Electronic Circuit Simulation	1		2	1	4					
	CAD for electrical engineering I	+		+	+	+					
	Operating systems										
	Java Programming	1		2	1	4					
B4 Optional courses (2 courses out of 4 are chosen)											
13 14	Computer network administration										
	Software Engineering						2		2		2
	CAD for electrical engineering II						+		+		+
	Electrical and electronic equipment for automotive II						2		2		2