

# 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)

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

### 1<sup>st</sup> Year

No. crt.	Course	Code	1 <sup>st</sup> Semester					2 <sup>nd</sup> Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Math.Analisys	EEC101	3	2			6					
02	Linear Algebra and Analytic Geometry	EEC102	2	2			5					
03	Applied computer science	EEC103	2	1			3					
04	History of technology and professional communication	EEC104	2	1			3					
05	Physics	EEC105	2	1	2		6					
06	Computer Programming and Programming Languages I	EEC106	2		2		5					
07	Modern laguages I	LBS1	1	1			2					
08	Physical Training I	EDF1		1			1					
09	Internet	EEC209						1		2	1	5
10	Computer assisted graphics	EEC210						2		2		4
11	Math. Fundamentals of Computers	EEC211						2	2			6
12	Computer Programming and Programming Languages II	EEC212						2		3	1	7
13	Energy Sources	EEC213						2	1	2		6
14	Modern laguages II	LBS2						1	1			2
15	Physical Training I	EDF2							1			1

### 2<sup>nd</sup> Year

No. crt.	Course	Code	3 <sup>rd</sup> Semester					4 <sup>th</sup> Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Special Mathematics	EEC301	2	2			5					
02	Computer Programming and Programming Languages III	EEC302	2		2		4					
03	Materials in Electrical Engineering	EEC303	2		2		4					
04	System Theory	EEC304	3	2			5					
05	Electromagnetic Field Theory	EEC305	3	3	1		7					

06	Computer Programming and Programming Languages III	EEC306			1		2						
07	Modern languages III	LBS3	1	1			2						
08	Physical Training III	EDF3		1			1						
09	Numerical Methods	EEC407						2		2			4
10	Analog electronics	EEC408						3	2	1			5
11	Computer Programming and Programming Languages IV	EEC409						1		2	1		4
12	Electrical Circuits Theory	EEC410						3	3				7
13	Electrical Measurements	EEC411						2		2			4
14	Modern languages IV	LBS4						1	1				2
15	Physical Training IV	EDF4							1				1
16	Domain Practical Placement	EEC415											4

### 3<sup>rd</sup> Year

No. crt.	Course	Code	5 <sup>th</sup> Semester					6 <sup>th</sup> Semester					
			C	S	L	P	Cred	C	S	L	P	Cred	
01	Switchgear equipments	EEC501	3		3		6						
02	Static converters	EEC502	2		2		5						
03	Electrical machines	EEC503	2		2	1	5						
04	Analog Integrated Circuits	EEC504	2	1	1		5						
05	Data Bases	EEC505	1		2		3						
06	Digital Signal Processing	EEC606						2		2			4
07	Data Acquisition	EEC607						2		1	1		4
08	Microcontrollers	EEC608						2		2			4
09	Power Plants and Transport of Electrical Energy	EEC609						2		2			4
10	Digital Electronics	EEC610						2		2			4
11	Practical Placement II	EEC611											4
A3 (there are choosed 2courses of 4)													
12 13	Industrial automation	EEC512	2+2		1+	1	3						
	Virtual instrumentation I	EEC513											
	Microsensors and actuators	EEC514											
	Graphical user interfaces design	EEC515											
B3 (there are choosed 2courses of 4)													
14 15	Computer architecture	EEC616						2+2		1+1			3
	Virtual instrumentation II	EEC617											
	Electrical equipment monitoring and diagnosis	EEC618											
	Electrical and electronic equipment for automotive I	EEC619											

### 4<sup>th</sup> Year

No. crt.	Course	Code	7 <sup>th</sup> Semester					8 <sup>th</sup> Semester					
			C	S	L	P	Cred	C	S	L	P	Cred	
01	Electrical Drives	EEC701	2		2		4						
02	Computer Interfaces and Peripherals	EEC702	2		2		4						

03	Electrical Installations	EEC703	2		1	1	5					
04	Electromagnetic compatibility	EEC704	2		3		4					
05	Computer Networks	EEC705	2		2		3					
06	Management	EEC806						2	1		1	4
07	Industrial Control	EEC807						3		3		6
08	Data Transmission & Protocols	EEC808						2		2		4
09	Analysis of nonlinear systems in electrical engineering	EEC809						2	1	1		4
10	Practical Placement III	EEC810										4
11	Diploma project elaboration	EEC810										4
A4 (there are choosed 2courses of 4)												
12 13	Power Electronic Circuit Simulation	EEC711	1+1		2+2	1+1	5 +	5				
	CAD for electrical engineering I	EEC712										
	Operating systems	EEC713										
	Java Programming	EEC714										
B4 (there are choosed 2courses of 3)												
14 15	Computer network administration	EEC815						2+2		2+2		2 +
	Software Engineering	EEC816										
	CAD for electrical engineering II	EEC817										
	Electrical and electronic equipment for automotive II	EEC818										
												2