

# Transilvania University of Braşov, Romania

## Study program: Applied Electronics

Faculty: Electrical Engineering and Computer Science

Study period: 4 years (bachelor)

Academic year structure: 2 semesters (14 weeks per semester).  
(Semester 2, Year 4 - 10 weeks)

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	Communication Skills	ETTI101	1	2	-	-	3					
02	Applied Informatics I	ETTI102	1	-	2	-	4					
03	Mathematical Analysis	ETTI103	3	2	-	-	6					
04	Linear Algebra, Analytical and Differential Geometry	ETTI104	3	2	-	-	7					
05	Computers Programming and Programming Languages	ETTI105	2	-	2	1	5					
06	Computer Assisted Graphics	ETTI106	-	-	2	-	3					
07	English Language I	LE01	1	1	-	-	2					
	French Language I	LF01										
	German Language I	LG01										
	Spanish Language I	LS01										
08	Physical Training I	EF01	-	1	-	-	1					
09	Special Mathematics	ETTI207						2	1	-	-	4
10	The Equations of Mathematical Physics	ETTI208						3	2	-	-	6
11	Basics of Electrotechnics	ETTI209						2	1	-	-	4
12	Theory of Probabilities and Mathematical Statistics	ETTI210						2	1	-	-	4
13	Physics	ETTI211						3	1	1	-	6
14	Object Oriented Programming	ETTI212						2	-	2	-	4
15	English Language II	LE02						1	1	-	-	2
	French Language II	LF02										
	German Language II	LG02										
	Spanish Language II	LS02										
16	Physical Training II	EF02						-	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	Measurements in electronics and telecommunications	ETTI301	2	-	1	-	4					
02	Signals and Systems I	ETTI302	3	2	1	-	6					

03	Electronic Devices	ETTI303	3	2	1	-	6						
04	JAVA Programming	ETTI304	2	-	2	-	5						
05	Applied Informatics II	ETTI305	2	-	-	1	4						
06	English Language III	LE03	1	1	-	-	2						
	French Language III	LF03											
	German Language III	LG03											
	Spanish Language III	LS03											
07	CAD Techniques in the Design of Electronic Modules	ETTI306	1	-	2	-	3						
08	Spice Models	ETTI307											
09	Physical Training III	EF03	-	1	-	-	1						
10	Fundamental Electronic Circuits	ETTI408						2	2	1	-	5	
11	Signals and Systems II	ETTI409						3	2	1	-	6	
12	Analog Integrated Circuits	ETTI410						2	2	2	-	6	
13	Digital Integrated Circuits	ETTI411						4	2	2	-	7	
14	English Language IV	LE04						1	1	-	-	2	
	French Language IV	LF04											
	German Language IV	LG04											
	Spanish Language IV	LS04											
15	Physical Training IV	EF04						-	1	-	-	1	
16	Practical Placement	ETTI412						90 hours				4	

### 3<sup>th</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	Electromagnetic Compatibility	EA501	2	-	1	-	4						
02	Microprocessor Architecture	EA502	3	2	1	-	6						
03	Communication Fundamentals	EA503	2	-	1	-	4						
04	Digital Signal Processing	EA504	2	-	2	-	4						
05	Design of Electronic Circuits	EA505	-	-	-	2	2						
06	Optical Communications	EA506	2	-	1	-	3						
07	Renewable Energy Generation	EA507											
08	Automatic Systems and Actuators	EA508	2	-	1	-	3						
09	Sensor Systems	EA509											
10	Data Structures and Algorithms	EA510	2	-	2	-	4						
11	Electronic Instrumentation	EA611						3	-	2	-	5	
12	Medical Electronics	EA612						2	-	1	-	3	
13	Hardware Description Languages	EA613						1	-	2	1	4	
14	Computer Architecture	EA614						2	-	2	1	5	
15	Image Processing	EA615						2	-	1	-	3	
16	Databases	EA616						2	-	1	-	3	
17	Computer Operating Systems	EA617											
18	Advanced Computer Graphics	EA618						2	-	1	-	3	
19	Distributed Systems and WEB Architectures	EA619											
20	Practical Placement	EA620						90 hours				4	

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	Power Electronics	EA701	2	-	1	-	3					
02	Network and Internet Architectures	EA702	2	-	2	-	4					
03	Embedded Systems	EA703	2	-	2	-	5					
04	VLSI Design Techniques	EA704	2	-	1	1	5					
05	Television	EA705	3		2		5					
06	Microcontroller Applications	EA706	2	-	2	-	4					
07	Software for Applied Electronics	EA707										
08	Multimedia Technologies	EA708	2	-	2	-	4					
09	Internet Programming Technologies	EA709										
10	Construction and Technology of Electronic Equipment	EA810						2	-	2	-	4
11	Testing of Electronic Equipment	EA811						2	-	2	-	4
12	Communication Systems	EA812						2	-	1	-	2
13	Interfaces and Peripherals	EA813						3	-	1	1	5
14	Virtual Instrumentation	EA814						2	-	2	-	2
15	Electronic Systems Technology	EA815										
16	General Economy	EA816						2	1	-	-	2
17	Elaboration of the Diploma Project	EA817						-	-	-	6	5
18	Practical Activity for Diploma Work	EA818							60 hours			6