

Transilvania University of Braşov, Romania

Study program: Applied Electronics

Faculty	Faculty of Electrical Engineering and Computer Science
Study program (Curriculum)	Applied Electronics
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	ETTI101	1	2	-	-	3					
02	Applied Informatics	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 I	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

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Measurements in electronics and telecommunications	ETTI301	2	-	1	-	5					
02	Signals and Systems I	ETTI302	3	2	1	-	6					
03	Electronic Devices	ETTI303	3	2	1	-	6					
04	Computers Programming and Programming Languages II	ETTI304	2	-	2	1	5					
05	Materials in Electronics	ETTI305	2	-	-	-	3					
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						3	2	2	-	6
13	Digital Integrated Circuits	ETTI411						3	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

3th Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Electromagnetic Compatibility	EA501	2	-	1	-	4					
02	Microprocessor Architecture	EA502	4	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	Java Programming	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										
19	Distributed Systems and WEB Architectures	EA619						2	-	1	-	3
20	Practical Placement	EA620						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	Power Electronics	EA701	2	-	1	-	3					
02	Computer Networks	EA702	2	-	2	-	4					
03	Embedded Electronic Systems	EA703	3	-	2	-	5					
04	The Design of Integrated Circuits	EA704	2	-	1	1	5					
05	Radio and Television	EA705	3		2		5					
06	Microcontroller Applications	EA706	2	-	2	-	4					
07	Embedded Software	EA707										
08	Internet and Multimedia Technologies	EA708	2	-	2	-	4					
09	Internet Applications Programming	EA709										
10	Electronic Systems Technology	EA810						2	-	2	-	4
11	Testing of Electronic Equipment	EA811						2	-	2	-	4
12	Communication Systems	EA812						2	-	1	-	2
13	Entrepreneurship	EA813						2	1	-	-	2
14	Interfaces and Peripherals	EA814						3		1	1	5
15	Virtual Instrumentation in Electronic Technology	EA815										
16	Hardware and Software Applications for Electronic Technologies	EA816						2	-	2	-	3
17	Electronic Systems Project	EA817						-	-	-	3	6
18	Practical Activity for Preparing the Diploma Work	EA818						60 hours				4