

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	Ethics and academic integrity	ETTI101	1	2	-	-	4					
02	Applied Informatics	ETTI102	1	-	2	-	5					
03	Mathematical Analysis	ETTI103	3	2	-	-	5					
04	Linear Algebra, Analytical and Differential Geometry	ETTI104	3	2	-	-	5					
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					
08	Physical Training I	EF01	-	1	-	-	1					
09	Special Mathematics	ETTI209						2	1	-	-	4
10	The Equations of Mathematical Physics	ETTI210						3	1	1	-	5
11	Basics of Electrotechnics	ETTI211						2	1	-	-	4
12	Theory of Probabilities and Mathematical Statistics	ETTI212						2	1	-	-	4
13	Physics	ETTI213						3	1	1	-	5
14	Object Oriented Programming	ETTI214						2	-	2	-	5
15	English Language. II	LE02						1	1	-	-	2
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	-	4					
02	Signals and Systems I	ETTI302	3	1	2	-	6					
03	Electronic Devices	ETTI303	2	2	1	-	6					
04	JAVA Programming	ETTI304	2	-	2	-	5					
05	Applied Informatics II	ETTI305	2	-	-	1	4					
06	Spice Models	ETTI306	1	-	2	-	3					

07	CAD Techniques in the Design of Electronic Modules	ETI307											
08	English Language III	LE03	1	1	-	-	2						
08	Physical Training III	EF03	-	1	-	-	1						
10	Fundamental Electronic Circuits	ETI410						2	2	1	-	5	
11	Signals and Systems II	ETI411						3	2	1	-	6	
12	Analog Integrated Circuits	ETI412						2	2	1	-	6	
13	Digital Integrated Circuits	ETI413						4	2	2	-	7	
14	English Language IV	LE04						1	1	-	-	2	
15	Physical Training IV	EF04						-	1	-	-	1	
16	Practical Placement	ETI416						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	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	Data structures and algorithms	EA506	2	-	2	-	4					
07	Renewable Energy Generation	EA507a	2	-	1	-	3					
08	Optical Communications	EA507b										
09	Sensor and Traductors	EA508a	2	-	1	-	3					
10	Automatic Systems and Actuators	EA508b										
11	Electronic Instrumentation	EA611						3	-	2	-	5
12	Testing of Electronic Equipment	EA612						2	-	2	-	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

4th Year

No. crt.	Course	Code	7 th Semester					8 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Artificial Intelligence	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	Software for Applied Electronics	EA706	2	-	2	-	4					
07	Practical applications of microcontrollers	EA707										
08	Programmable Logic Controllers	EA708	2	-	2	-	4					

09	Multimedia Technologies	EA709										
10	Construction and Technology of Electronic Equipment	EA810						2	-	2	-	4
11	Power Electronics	EA811						2	-	1	-	4
12	Communication Systems	EA812						2	-	1	-	2
13	Interfaces and Peripherals	EA813						3	-	1	1	5
14	General Economy	EA814						2	1	-	-	2
15	LabVIEW Programming	EA815						2	-	1	-	2
16	Virtual Instrumentation	EA816										
17	Elaboration of the Diploma Project	EA817						-	-	-	4	5
18	Practical Activity for Diploma Work	EA818						90 hours				6