

Transilvania University of Braşov, Romania

Study program: Electrotechnics

Faculty:	Faculty of 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)

1st Year

No. crt.	Course	Code	1 st Semester					2 nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Mathematical Analysis	ET101	3	2			6					
02	Linear Algebra, Differential Geometry	ET102	3	2			6					
03	Computer Programming and Programming Languages I	ET103	2		2		5					
04	Physics I	ET104	2	2			4					
05	Technological Methods and Procedures	ET105	2		1		4					
06	Communication	ET106	1	2			3					
07	Foreign Languages I	ET107	1	1			2					
08	Sport Activities I	ET108		1			1					
09	Special Mathematics	ET209						3	2			6
10	Computer Programming and Programming Languages II	ET210						2		2		5
11	Computer Aided Graphics	ET211						1		2		3
12	Physics II	ET212						3		1		5
13	Electrical Circuit Theory 1	ET213						2	3	1		6
14	Chemistry	ET214						2		1		3
15	Foreign Languages II	ET215						1	1			2
16	Sport Activities II	ET216							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	Electrical Circuit Theory 2	ET301	2	2			5					
02	Computer Programming and Programming Languages III	ET302	1		2		3					
03	Electromagnetic Field Theory	ET303	2	3			6					
04	Electrotechnics Materials	ET304	2		2		4					
05	Analog Electronics	ET305	2	1	1		4					
06	Digital Electronics	ET306	2		1		4					

07	Elements of Mechanical Engineering II	ET307	1		1		2					
08	Foreign Languages III	ET308	1	1			2					
09	Sport Activities III	ET309		1			1					
10	Microprocessors Systems	ET410						2		1		3
11	Energy Sources	ET411						2		1		3
12	Electrical and Electronic Measurements	ET412						2		2		4
13	Electromagnetic Converters I	ET413						2		2		4
14	Electrical Equipments	ET414						3		3		6
15	System Theory and Control	ET415						2	1	1		4
16	Foreign Languages IV	ET416						1	1			2
17	Sport Activities IV	ET417							1			1
18	Practice I (90 hours/year)	ET418										4

3rd Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Microcontroller Programming	ET501	2		2		5					
02	Sensors and Transducers	ET502	2		1		3					
03	Electromagnetic Converters II	ET503	2		2	1	5					
04	Static Converters	ET504	2		2		4					
05	Project- Static Converters	ET505				1	2					
06	Production, Transmission and Distribution of Electric Energy	ET506	2		1		4					
07	Accounting Fundamentals	ET607						1	2			3
08	Programmable Logic Controllers	ET608						2		2		3
09	Data Acquisition	ET609						2		1	1	4
10	Frequency Converters	ET610						2		2		4
11	Electrical Drives I	ET611						2		2		4
12	Practice II (90 hours/year)	ET612										4
13	Protection of Electrical Installations	ET513	2		1		4					
14	Thermotechnics	ET514	2		1	1	4					
15	Storage Energy Systems	ET515	2		1		3					
16	Electrical Domestic Appliances	ET516	2		1		3					
17	Image Processing for Electrotechnics	ET618						2		2		4
18	CAD for Electrical Installations (Autocad, Cadelec)	ET620						2		1	1	4

4th Year

No. crt.	Course	Code	7 th Semester					8 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Industrial Control using Computers	ET701	2		2		5					
02	Fundamentals of Modeling, Designing & Testing Electrical Systems	ET702	2		3	1	5					
03	Electrical Drives II	ET703	2		1	1	5					
04	Electrical Installations	ET704	2		2	1	5					

05	Electromagnetic Compatibility	ET705	3		2		5					
06	Fundamentals of Electrical Systems Optimization	ET806						2		3		5
07	Statistics and Reliability	ET808						2		3		4
08	Entrepreneurship	ET809						2	1			2
09	Diploma project elaborating (6 hours x 10 weeks=60hours)	ET810										4
10	Practice III (for elaborating the diploma project, 60 hours/year)	ET811										6
11	Electrosecurity	ET712	2		2		5					
12	Automotive Electrical Equipment	ET813						2		3	1	4
13	Power Supply of Industrial Consumers	ET814						2		2		3