

CURRICULUM – 1st YEAR
2024-2025

UNIVERSITY	GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TÂRGU MURES	PROGRAMME OF STUDY	ENERGETIC AND ȘI INFORMATION TECHNOLOGY
FACULTY	FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGIES	TITLE AWARDED	GRADUATE ENGINEER
FIELD OF STUDY	POWER ENGINEERING	OFFICIAL LENGTH OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6 LEVEL CNC	NUMBER OF ECTS/SECT CREDITS	60 + 2

No.	Educational activities	Code/Type of course	1 st Semester (14 weeks)								2 nd Semester (14 weeks)								Total academic year			
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)							
			Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	LP	Indiv. Std.	ECTS
	Compulsory courses																					
1	Mathematical analysis	ETI101/DF	6	6S	6	E												42	42	66	6	
2	Physics	ETI102/DF	4	4SL	5	E												28	28	69	5	
3	English Language I	ETI103/DC	-	4S	2	C												-	28	22	2	
4	Physical Education I	ETI104/DC	-	2L	1	A/R												-	14	11	1	
5	Linear algebra, analytical and differential geometry	ETI105/DF					6	4S	6	E								42	28	80	6	
6	Computer Programming and Programming languages	ETI106/DF					6	4L	6	E								42	28	80	6	
7	Electrotechnics I	ETI107/DD					4	4SL	5	E								28	28	69	5	
8	Applied Informatics	ETI108/DF									4	4L	5	E				28	28	69	5	
9	Electronics	ETI109/DD									6	4L	5	E				42	28	55	5	
10	English Language II	ETI110/DC									-	4S	2	C				-	28	22	2	
11	Chemistry	ETI111/DF									2	2L	3	C				14	14	47	3	
12	Computer Aided Graphics	ETI112/DF													4	2L	4	C	28	14	58	4
13	Special Mathematics	ETI113/DF													6	4S	6	E	42	28	80	6
14	Introduction to electrical engineering	ETI114/DD													4	4S	5	E	28	28	69	5
15	Physical Education II	ETI115/DC													-	2L	1	A/R	-	14	11	1
GENERAL TOTAL		8DF, 3DD, 4DC	10	16	14	2E, 1C, 1A/R	16	12	17	3E	12	14	15	2E,2C	14	12	16	2E,1C, 1A/R	364	378	808	62
TOTAL HOURS/CREDITS		15 Compulsory	27 hours /week ; 30+1 ECTS								26 hours/week; 30+1 ECTS								742			

Formative categories		Activities	
DF	Foundamental course	C	Courses
DD	Technical course	S	Seminars
DS	Specialized course	LP	Practical exercise
DC	Complementary course	P	Project

CURRICULUM – 2nd YEAR 2024-2025

UNIVERSITY	GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TÂRGU MURES	PROGRAMME OF STUDY	ENERGETIC AND ȘI INFORMATION TECHNOLOGY
FACULTY	FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGIES	TITLE AWARDED	GRADUATE ENGINEER
FIELD OF STUDY	POWER ENGINEERING	OFFICIAL LENGTH OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6 LEVEL CNC	NUMBER OF ECTS/SECT CREDITS	60 + 2

No.	Educational activities	Code/Type of course	1 st Semester (14 weeks)								2nd Semester (14 weeks)								Total academic year				
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)								
			Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Forma verif	Course	SLP	ECTS	Verif form	Course	LP	Indiv. Std.	ECTS	
	Compulsory courses																						
1	Electrotechnics II	ETI201/DD	4	6SL	6	E												28	42	80	6		
2	Heat Engineering I	ETI204/DD	4	4L	5	E												28	28	69	5		
3	Technology of Materials	ETI217/DD	4	4L	5	C												28	28	69	5		
4	Tehnics of artificial intelligence	ETI212/DD					4	2L	3	E								28	14	33	3		
5	Electrical and Electronic Measurements	ETI203/DD					6	4SL	6	E								42	28	80	6		
6	Hydraulic Bases	ETI216/DD					4	2L	3	E								28	14	33	3		
7	English Language III	ETI206/DC					-	4S	2	C								-	28	22	2		
8	Physical Education III	ETI207/DC					-	2L	1	A/R									14	11	1		
9	Numerical Methods	ETI205/DF									6	4S	6	E				42	28	80	6		
10	Renewable energy	ETI209/DD									4	4L	5	E				28	28	69	5		
11	English Language IV	ETI213/DC									-	2S	2	C				-	28	22	2		
12	Ethics and academic integrity	ETI218/DC									2	-	1	C				14		11	1		
13	Physical Education IV	ETI214/DC									-	2L	1	A/R				-	14	11	1		
14	The theory of automatic adjustment	ETI208/DD													4	4SL	4	E	28	28	44	4	
15	Electric Machines and Drive Systems	ETI210/DD													4	6LP	5	E	28	42	55	5	
16	Equipments and thermal installations	ETI211/DD													4	4L	3	E	28	28	19	3	
17	Practical training	ETI215/DD	90															4	C	-	90	10	4
GENERAL TOTAL		1DF, 11DD, 5DC	12	14	16	2E,1C	14	14	15	3E, 1C, 1A/R	12	14	15	2E,2C, 1A/R	12	14	16	3E, 1C	350	482	718	62	
TOTAL HOURS/CREDITS		15 Compulsory, 2 Optional	27 hours/week; 31 ECTS								26 hours/week ; 31 ECTS								832				

Formative categories		Activities	
DF	Foundamental course	C	Courses
DD	Technical course	S	Seminars
DS	Specialized course	LP	Practical exercise
DC	Complementary course	P	Project

CURRICULUM – 3rd YEAR 2024-2025

UNIVERSITY	GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TÂRGU MURES	PROGRAMME OF STUDY	ENERGETIC AND ȘI INFORMATION TECHNOLOGY
FACULTY	FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGIES	TITLE AWARDED	GRADUATE ENGINEER
FIELD OF STUDY	POWER ENGINEERING	OFFICIAL LENGTH OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6 LEVEL CNC	NUMBER OF ECTS/SECT CREDITS	60

No.	Educational activities	Code/Type of course	1 st Semester (14 weeks)								2 nd Semester (14 weeks)								Total academic year			
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)							
			Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	LP	Indiv. Std.	ECTS
	Compulsory courses																					
1	Electric Networks I	ETI304/DD	4	6SL	6	C												28	42	80	6	
2	Data structures and algorithms	ETI301/DS	4	4L	4	C												28	28	44	4	
3	Echipamente electrice I	ETI302/DD	4	4S	5	E												28	28	69	5	
4	Power Electronics	ETI303/DS					4	4LP	4	E								28	28	44	4	
5	Transformer and Substation Points	ETI306/DS					4	2L	3	E								28	14	33	3	
6	Electrical Devices II	ETI309/DD					4	4L	5	C								28	28	69	5	
7	Electric Networks II	ETI310/DD					4	-	2	E								28	-	22	2	
		ETI311/DD					-	2P	1	C								-	14	11	1	
8	Programming microprocessor and microcontrollers	ETI308/DS									4	6LP	6	E				28	42	80	6	
9	Computer networks	ETI307/DS									4	4L	4	E				28	28	44	4	
10	Electromagnetic compatibility	ETI305/DS									4	2L	3	C				28	14	33	3	
11	Reliability power systems	ETI315/DD													4	4S	4	E	28	28	44	4
12	Production of electric power and thermal	ETI316/DD													6	6LP	6	E	42	42	66	6
13	Data base in energetic	ETI314/DS													4	4L	3	E	28	28	19	3
14	On-site Training	ETI313/DS	90														4	C	-	90	10	4
GENERAL TOTAL		9DD, 9DS	12	14	15	1E,2C	16	12	15	3E, 2C	12	12	13	2E,1C	14	14	17	3E, 1C	378	454	668	60
TOTAL HOURS /CREDITS		11 Compulsory, 3 Optional	27 hours/week; 30 ECTS								26 hours/week; 30 ECTS								832			

Formative categories		Activities	
DF	Foundamental course	C	Courses
DD	Technical course	S	Seminars
DS	Specialized course	LP	Practical exercise
DC	Complementary course	P	Project

CURRICULUM – 4th YEAR
2024-2025

UNIVERSITY	GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TÂRGU MUREȘ	PROGRAMME OF STUDY	ENERGETIC AND ȘI INFORMATION TECHNOLOGY
FACULTY	FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGIES	TITLUL ABSOLVENTULUI	GRADUATE ENGINEER
FIELD OF STUDY	POWER ENGINEERING	OFFICIAL LENGTH OF THE PROGRAMME OF STUDY	4 YEARS
LEVEL OF QUALIFICATION	6 LEVEL CNC	NUMBER OF ECTS/SECT CREDITS	60

No.	Educational activities	Code/Type of course	1 st Semester (14 weeks)								2 nd Semester (14 weeks)								Total academic year				
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)								
			Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	SLP	ECTS	Verif form	Course	LP	Indiv. Std.	ECTS	
	Compulsory courses																						
1	Optimization of energetical process	ETI412/DS	6	4L	6	E													42	28	80	6	
2	Programs of simulation and virtual instrumentation	ETI406/DS	4	4L	5	E													28	28	69	5	
3	Integration, interconnection and operating SRE	ETI407/DS	4	4L	4	C													28	28	44	4	
4	Smart energy systems	ETI405/DS					4	6LP	5	E									28	42	55	5	
5	Techniques of High Level Voltages	ETI404/DS					6	4L	6	E									42	28	80	6	
6	Data Transmission	ETI413/DS					4	2L	4	C									28	14	58	4	
8	SCADA systems in driving energy process	ETI401/DS									4	6LP	5	E					28	42	55	5	
9	Theory and modelling energy systems	ETI402/DS									6	4L	5	C					42	28	55	5	
		ETI403/DS									-	2P	2	C					-	14	36	2	
10	Automation and protection SEE	ETI409/DS													6	6LP	5	E	42	42	41	5	
11	Electrical Energy Use	ETI408/DS													6	4L	5	E	42	28	55	5	
12	Diploma project practical training	ETI410/DS	70															4	C	-	70	30	4
13	Diploma project drafting	ETI411/DS									-	4P			-	4P	4	C	-	56	44	4	
GENERAL TOTAL		14DS	14	12	15	2E,1C	14	12	15	2E,1C	10	16	12	1E, C	12	14	18	2E,2C	350	448	702	60	
TOTAL HOURS/CREDITS		11 Compulsory/ 3 Optional	26 hours/week; 30 ECTS								26 hours/week; 30 ECTS								798				

Formative categories		Activities	
DF	Foundamental course	C	Courses
DD	Technical course	S	Seminars
DS	Specialized course	LP	Practical exercise
DC	Complementary course	P	Project