

UNIVERSITY OF ORADEA
FACULTY OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY
 Licence's Degree Program: **ELECTRICAL SYSTEMS**
 Fundamental Field: **ENGINEERING SCIENCES**
 Undergraduate Field: **ELECTRICAL ENGINEERING**
 Duration of studies / no. of credits: **4 years/240 credits**
 Type of education: **Full-time learning (IF)**

Valid from academic year
 2023-2024
 Beginning with 1st year of
 study

CURRICULUM **
Year of study I

Code	Disciplines*	Type	Sem. I [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
IETI-0003	Mathematical Analysis	FD	2	2	-	-	56	Ex	4	44	
IETI-0002	Linear algebra, analytical and differential geometry	FD	2	1	-	-	42	Ex	3	33	
IETI-0784	Applied Informatics I	FD	2	-	2	-	56	Ex	5	69	
IETI-1048	Computer-Assisted Graphics I	FD	2	-	2	-	56	Vp	4	44	
IETI-0013	Physics	FD	2	1	-	-	42	Ex	4	58	
IETI-1046	Quality and reliability	DD	2	1	-	-	42	Vp	4	58	
IETI-0212	Technological methods and procedures	DD	2	-	2	-	56	Vp	4	44	
IETI-0548	Modern languages I	CD	-	1	-	-	14	Vp	2	36	
	TOTAL		14	6	6	-	364		30	386	
IETI-0999	Physical Education and Sport I	CD	-	1	-	-	14	A/R	1	11	

Code	Disciplines*	Type	Sem. II [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
IETI-0009	Special mathematics	FD	2	2	-	-	56	Ex	4	44	
IETI-0786	Applied informatics II	FD	2	-	2	-	56	Ex	5	69	
IETI-0247	Electromagnetic field theory	DD	2	1	2	-	70	Ex	6	80	
IETI-1228	Bond graphs in electrotechnics I	SD	2	-	2	-	56	Vp	5	69	
IETI-1049	Computer-Assisted Graphics II	FD	2	-	2	-	56	Vp	4	44	
IETI-0205	Electrotechnic materials	DD	2	-	2	-	56	Ex	4	44	
IETI-0549	Modern Languages II	CD	-	1	-	-	14	Vp	2	36	
	TOTAL		12	4	10	-	364		30	386	
IETI-1000	Physical Education and Sport II	CD	-	1	-	-	14	A/R	1	11	

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Head of department ,
Lecturer Ph.D eng. ARION Mircea-Nicolae

RECTOR,
Professor Dr. BUNGĂU Constantin

DEAN,
Professor dr. HATHAZI Francisc Ioan

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CURRICULUM **
Year of study II

Code	Disciplines*	Type	Sem. III [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
OBLIGATORII IMPUSE											
IETI-1115	Numerical methods I	FD	2	1	2	-	70	Ex	5	55	
IETI-0138	Computer programming and programming languages	FD	2	-	1	-	42	Ex	4	58	
IETI-0203	Electric and electronic measurements I	DD	2	-	2	-	56	Ex	5	69	
IETI-0248	Theory of electrical circuits I	DD	2	2	2	-	84	Ex	5	41	
IETI-0315	Analogical and digital electronics I	DD	2	-	2	-	56	Ex	4	44	
IETI-0194	Bond graphs in electrotechnics	SD	2	-	1	-	42	Vp	4	58	
IETI-0550	Modern Languages III	CD	-	1	-	-	14	Vp	2	36	
TOTAL			12	4	10	-	364		29	361	
OBLIGATORII OPȚIONALE											
IETI-1108	Academic Ethics and Integrity	CD	1	-	-	-	14	Vp	1	11	
IETI-0487	Communication	CD	1	-	-	-	14	Vp	1	11	
TOTAL			1	-	-	-	14		1	11	
IETI-1003	Physical Education and Sport III	CD	-	1	-	-	14	A/R	1	11	
FACULTATIVE											
IETI-0511	Philosophy	CD	2	1	-	-	42	Vp	2	8	

Code	Disciplines*	Type	Sem. IV [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
OBLIGATORII IMPUSE											
IETI-0249	Theory of electrical circuits II	DD	2	1	2	-	70	Ex	4	30	
IETI-0204	Electric and electronic measurements II	DD	2	-	2	-	56	Ex	4	44	
IETI-0316	Analogical and digital electronics II	DD	2	-	1	-	42	Ex	4	58	
IETI-1116	Numerical methods II	FD	2	-	1	-	42	Ex	4	58	
IETI-0972	Power Quality / Quality of the electrical energy	SD	2	-	-	1	42	Vp	3	33	
IETI-0272	Electrical machines I	DD	2	-	2	-	56	Ex	4	44	
IETI-0551	Modern Languages IV	CD	-	1	-	-	14	Vp	1	11	
IETI-1037	Domain practice	DD	-	-	-	-	90	Vp	4	10	
TOTAL			12	2	8	1	412		28	288	
OBLIGATORII OPȚIONALE											
IETI-0242	Programming techniques	SD	2	-	1	-	42	Vp	2	8	
IETI-0478	Web technologies	SD	2	-	1	-	42	Vp	2	8	
TOTAL			2	-	1	-	42		2	8	
IETI-1006	Physical Education and Sport IV	CD	-	1	-	-	14	A/R	1	11	
FACULTATIVE											
IETI-1123	Introduction to the finite element method	SD	2	-	1	-	42	Vp	2	8	

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CURRICULUM **
Year of study III

Code	Disciplines*	Type	Sem. V [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
IETI-0171	Fundamentals of computer aided design	SD	2	-	1	-	42	Ex	4	58	
IETI-0271	Electrical machines	DD	2	-	2	-	56	Ex	4	44	
IETI-1120	Electric Machines - Project	DD	-	-	-	1	14	Vp	2	36	
IETI-0234	Superconductors and superconducting systems	SD	2	-	1	-	42	Ex	5	83	
IETI-0552	Management	DD	2	-	-	-	28	Vp	2	22	
IETI-1061	Theory of Systems and Automated Regulation	DD	2	-	1	-	42	Vp	3	33	
IETI-0182	Electrical equipments	DD	2	-	2	-	56	Vp	4	44	
	TOTAL		12	-	7	1	280		24	320	
	OBLIGATORII OPŃZŃTONALE										
	PACHET 1										
IETI-0240	Microwave technique	SD	2	-	-	1	42	Ex	3	33	
IETI-0179	Industrial process control	SD	2	-	-	1	42	Ex	3	33	
	PACHET 2										
IETI-1071	Microcontrollers and programmable logic cotrollers	DD	2	-	1	-	42	Vp	3	33	
IETI-0252	Transducers, interfaces and data acquisition	DD	2	-	1	-	42	Vp	3	33	
	TOTAL		4	-	1	1	84		6	66	
	FACULTATIVE										
IETI-1201	Life Skills in Electrical Engineering	CD	1	1	-	-	28	Vp	3	47	
IETI-1111	Modern languages V	CD	-	2	-	-	28	Vp	2	22	
IETI-0100	Computer Architecture	SD	2	-	1	-	42	Vp	2	8	

Code	Disciplines*	Type	Sem. VI [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	OBLIGATORII IMPUSE										
IETI-0410	Electrical Drives	DD	2	-	2	-	56	Ex	3	19	
IETI-0197	Electrical installations	SD	2	-	2	-	56	Ex	4	44	
IETI-1125	Electrical installations - Project	SD	-	-	-	1	14	Vp	2	36	
IETI-1070	Electric circuits simulation	SD	2	-	2	1	70	Ex	5	55	

IETI-1060	Static Power Converters	DD	2	-	1	-	42	Vp	3	33	
IETI-1087	Signal processing	SD	2	-	1	-	42	Vp	3	33	
IETI-0460	Microprocessor systems	DD	2	-	1	-	42	Ex	3	33	
IETI-1038	Specialty practice	SD	-	-	-	-	90	Vp	4	10	
	TOTAL		12	-	9	2	412		27	263	
	<i>OBLIGATORII OPd'z' TONALE</i>										
IETI-0170	Quality assurance in electrical systems	SD	2	-	1	-	42	Vp	3	33	
IETI-0230	Energy systems	SD	2	-	1	-	42	Vp	3	33	
	TOTAL		2	-	1	-	42		3	33	
	<i>FACULTATIVE</i>										
IETI-1112	Modern languages VI	CD	-	2	-	-	28	Vp	2	22	
IETI-1126	Databases for management	CD	2	-	1	-	42	Vp	2	8	

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Year of study IV

Code	Disciplines*	Type	Sem. VII [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
OBLIGATORII IMPUSE											
IETI-0415	Special electrical drive systems	SD	2	-	1	-	42	Ex	3	33	
IETI-0176	Electromagnetic compatibility	DD	2	2	-	-	56	Ex	4	44	
IETI-0965	Electromagnetic compatibility - project	DD	-	-	-	1	14	Vp	2	36	
IETI-0243	Microwave Technologies	SD	2	-	2	-	56	Ex	4	44	
IETI-0269	Electrothermy	SD	2	-	1	-	42	Vp	4	58	
IETI-0693	Electrothermics - Project	SD	-	-	-	1	14	Vp	2	36	
IETI-0817	Generation, transportation and distribution of electrical energy	DD	2	-	2	-	56	Vp	4	44	
TOTAL			10	2	6	2	280		23	295	
OBLIGATORII OPd'z'IONALE											
PACHET 1											
IETI-0643	Equipment for Heating, Ventilation and Air Conditioning	SD	2	-	1	-	42	Ex	4	58	
IETI-0169	Electrical utility equipment	SD	2	-	1	-	42	Ex	4	58	
PACHET 2											
IETI-0222	The design of electrical systems	SD	2	-	-	1	42	Ex	3	33	
IETI-0232	Real-time software	SD	2	-	-	1	42	Ex	3	33	
TOTAL			4	-	1	1	84		7	91	
FACULTATIVE											
IETI-1124	Low voltage electrical installations	SD	2	-	1	-	42	Ex	3	33	
IETI-1127	Home automation	SD	2	-	1	-	42	Ex	3	33	

Code	Disciplines*	Type	Sem. VIII [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
OBLIGATORII IMPUSE											
IETI-0255	Using electrical energy	SD	2	-	2	1	70	Ex	4	30	
IETI-0349	Modern commutation techniques	SD	2	-	1	-	42	Vp	2	8	
IETI-0190	Energetics surse	DD	2	-	1	-	42	Vp	3	33	
IETI-0188	Electrotechnologies	SD	2	-	1	-	42	Vp	4	58	
IETI-1044	Practice for the diploma project	SD	-	-	-	-	60	Vp	6	90	
IETI-1022	Diploma project development	SD	-	-	-	4	56	Vp	4	44	
TOTAL			8	-	5	5	312		23	263	
OBLIGATORII OPd'z'IONALE											
PACHET 1											
IETI-1128	Electromagnetic and thermal modeling in electrical systems	SD	2	-	2	1	70	Ex	4	30	
IETI-0971	Modeling and simulation of electrical machines	SD	2	-	2	1	70	Ex	4	30	
PACHET 2											
IETI-0251	Electrical tractions	SD	2	-	1	-	42	Vp	3	33	
IETI-1078	Electrical equipments for vehicles	SD	2	-	1	-	42	Vp	3	33	
TOTAL			4	-	3	1	112		7	63	
LICEND'z' d'z'											
IETI-0901	Diploma exam	SD	-	-	-	-	0	Ex	10	250	
FACULTATIVE											
IETI-1129	Protection of intellectual property	SD	2	1	-	-	42	Vp	3	33	

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