

“GHEORGHE ASACHI” TECHNICAL UNIVERSITY OF IAȘI

FACULTY OF ELECTRICAL ENGINEERING

Domain: Power Engineering

Specialization: **Power Systems Engineering**

Graduate title: Engineer, bachelor

Length of studies: 4 years

Form of education: with frequency

CURRICULUM

1st YEAR

Crt. no	Course title	Course code UTI.EH...	Conditionnings	1st semester						2nd semester									
				Hours/week/ discipline						V	K	Hours/week/ discipline						V	K
				C	S	L	P	SI			C	S	L	P	SI				
DI	101	Mathematical Analysis	EH2.101.DF.DI		2	2			3	E	5								
	102	Linear Algebra, Analytic and Differential Geometry	EH2.102.DF.DI		2	2			3	E	5								
	103	Physics	EH2.103.DF.DI		3	1	1		3	E	6								
	104	Computer assisted Graphics I	EH2.104.DF.DI		1		1		1	C	3								
	105	Applied Informatics I	EH2.105.DF.DI		1		2	1	2	E	5								
	106	Computer Programming and Programming Languages I	EH2.106.DF.DI		1		2		2	E	4								
	107	Differential Equations and Operational Calculus	EH2.107.DF.DI	C1, C2								2	2			2	E	5	
	108	Computer Programming and Programming Languages II	EH2.108.DF.DI	C3								2	2		2	E	5		
	109	Computer assisted Graphics II	EH2.109.DF.DI	C4								2	2		2	VP	4		
	110	Electromagnetic Field Theory	EH2.110.DID.DI									2	1	1		3	E	5	
	111	Physics – Elements of Newtonian Mechanics	EH2.111.DF.DI									2	1			1	E	3	
	112	Mechanics and Material Strength	EH2.112.DID.DI									2	1			1	C	3	
	113	Mechanics	EH2.113.DID.DI									2		1	1	C	2		
	114	Modern Languages	EH2.114.DC.DI			1			1	C	1		1			1	C	1	
	115	Physical Training	EH2.115.DC.DI				1						1			AR	2		
DO	116	Intellectual Work Technique	EH2.116.1.DC.DO			1				VP	1								
		Professional Communication	EH2.116.2.DC.DO																
DL	117	Modern Languages	EH2.117.DC.DL			1				C	1		1			C	1		
	118	Physical Training	EH2.118.DC.DL				1			AR	1								
	119	Ensemble Sports	EH2.119.DC.DL										1			AR	1		
	120	Personal Development	EH2.120.DC.DL		1	1				C	2								
	121	Mathematics	EH2.121.DF.DL			1				C	1								
Total hours per week, total tests number per semester and total credits per semester, for DI and DO					10	7	7	1	15	4E 3C	30	14	6	6	1	13	4E 3C	30	
					25			15				27			13				

Conditionnings	Previous compulsory discipline	
	Title	Code
C1	Mathematical Analysis	UTI.EH.EH2.101.DF.DI
C2	Linear Algebra, Analytic and Differential Geometry	UTI.EH.EH2.102.DF.DI
C3	Computer Programming and Programming Languages I	UTI.EH.EH2.106.DF.DI
C4	Computer assisted Graphics I	UTI.EH.EH2.104.DF.DI

DEAN,

Prof.univ.dr.ing. Marinela Temneanu

RECTOR,

Prof.univ.dr.ing. Dan Cașcaval

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Length of studies: 4 years

Form of education: with frequency

CURRICULUM

2nd YEAR

Crt. no	Course title	Course code UTI.EH...	Condi- tion- nings	1st semester					2nd semester														
				Hours/week/ discipline					V	K	Hours/week/ discipline					V	K						
				C	S	L	P	SI			C	S	L	P	SI								
201	Electrical Circuits Theory I	EN.201.DID.DI		2	1	1		3	E	5													
202	Numerical Analysis in Engineering	EN.202.DF.DI	C1	2		2		2	E	5													
203	Reliability and Industrial Risk	EN.203.DID.DI	C2	2		2		2	C	4													
204	Electronic Circuits and Devices	EN.204.DID.DI		2		1		2	C	4													
205	Electrical Safety	EN.205.DS.DI		2		1		2	C	3													
206	Fluid Mechanics	EN.206.DID.DI		2	1	1		2	E	4													
207	Electrical Circuits Theory II	EN.207.DID.DI									2		1		2	E	3						
208	Energy Resources and Conversion	EN.208.DID.DI									3		2		3	E	4						
209	Thermotechnics	EN.209.DID.DI									2		1		2	C	3						
210	Electrical and Non-Electrical Measurements I	EN.210.DID.DI									2		2		2	E	4						
211	Hydraulic and Thermal Machines	EN.211.DID.DI	C3, C4								2		2		2	C	4						
212	Electrical Machines I	EN.212.DID.DI									2		2		2	E	4						
213	Physical Training	EN.213.DC.DI				1							1			A/ R	1						
214	Practice, 3 weeks x 40 h/week=120 h	EN.214.DID.DI														C	4						
DO	215	Electrical Materials Technology	EN.215.1.DID.DO	2		2		1	E	5													
		Electrical Materials	EN.215.2.DID.DO																				
	216	General Economics and Marketing	EN.216.1.DC.DO									2	1			1	C	3					
	Marketing Strategies	EN.216.2.DC.DO																					
DL	217	Modern Languages	EN.217.DC.DL		1				C	1		1				C	1						
	218	European Civilization and Institutions	EN.218.DC.DL		1				C	1													
	219	Special Mathematics	220.DF.DL		1		1		C	2													
Total hours per week, total tests number per semester and total credits per semester, for DI and DO				14	2	11	0	14	4E 3C	30	15	4	8	0	14	4E 4C	30						
				27					14					27					14				

Conditionnings	Previous compulsory discipline	
	Title	Code
C1	Mathematical Analysis	UTI.EH.EL.101.DF.DI
C2	Linear Algebra	UTI.EH.EL.102.DF.DI
C3	Thermotechnics	UTI.EH.EN.209.DID.DI
C4	Fluid Mechanics	UTI.EH.EN.206.DID.DI

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CURRICULUM

3rd YEAR

Crt. no	Course title	Course code UTI.EH...	Conditionings	1st semester					2nd semester										
				Hours/week/ discipline					V	K	Hours/week/ discipline					V	K		
				C	S	L	P	SI			C	S	L	P	SI				
DI	301	Electrical Machines II	EN.301.DID.DI	C1	2		1	1	3	E	5								
	302	Electrical and Non-Electrical Measurements II	EN.302.DID.DI	C2	2		2		2	E	5								
	303	Electrical Equipment I	EN.303.DID.DI		3		2		3	E	5								
	304	Electromagnetic Compatibility	EN.304.DID.DI	C3	2		1		2	C	3								
	305	Equipment and Thermal Installations I	EN.305.DID.DI	C4	2	1			1	C	4								
	306	Use of Electrical Energy	EN.306.DS.DI		2		2		2	E	5								
	307	Automatic Control Elements	EN.307.DID.DI									2	2	2	E	4			
	308	Thermal and Electrical Energy Production	EN.308.DID.DI									2	2	1	3	E	5		
	309	Electricity Transmission and Distribution I	EN.309.DID.DI	C5								2	2	1	3	E	5		
	310	Electrical Part of Power Plants	EN.310.DID.DI									2	2	2	C	4			
	311	Practice, 3 weeks x 40 h/week=120 h	EN.311.DID.DI													C	4		
DO	312	Power Electronics	EN.312.1.DS.DO	C6								2	2	2	E	4			
		Static Switch Equipment	EN.312.2.DS.DO																
		Management	EN.313.1.DID.DO																
	313	Financial Resources and Economic Analysis	EN.313.2.DID.DO		2	1			1	C	3								
314	Electrical Equipment II	EN.314.1.DID.DO										2	2	2	C	4			
	Equipment and Thermal Installations II	EN.314.2.DID.DO																	
DL	315	Microprocessors in Power Engineering	EN.315.DS.DL	C4								2	1	2	C	4			
	316	Pollution Control in Power Engineering	EN.316.DS.DL									2	1	1	2	C	4		
Total hours per week, total tests number per semester and total credits per semester, for DI and DO					15	2	8	1	14	4E	30	12	0	12	2	14	4E	30	
					26					14	3C	26					14	3C	30

Conditionings	Previous compulsory discipline	
	Title	Code
C1	Electrical Machines I	UTI.EH.EN.212.DID.DI
C2	Electrical and Non-Electrical Measurements I	UTI.EH.EN.210.DID.DI
C3	Electromagnetic Field Theory	UTI.EH.EL.110.DF.DI
C4	Thermotechnics	UTI.EH.EN.209.DID.DI
C5	Electrical Circuits Theory II	UTI.EH.EN.207.DF.DI
C6	Electronic Circuits and Devices	UTI.EH.EN.204.DID.DI

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CURRICULUM

4th YEAR

Crt. no	Course title	Course code UTI.EH...	Conditionnings	1st semester						2nd semester								
				Hours/week/ discipline					V	K	Hours/week/ discipline					V	K	
				C	S	L	P	SI			C	S	L	P	SI			
DI	401	Electricity Transmission and Distribution II	ISE.401.DID.DI	C1	3	1	1	4	E	6								
	402	Automatic Control of Power Systems	EN.402.DS.DI	C2	2	2		2	E	5								
	403	High Voltage Engineering I	ISE.403.DS.DI	C3	3	3		3	E	7								
	404	Power Systems I	ISE.404.DS.DI	C1, C6	2	2	1	3	E	6								
	405	Management, Monitoring and Data Acquisition Systems	EN.405.DS.DI		3	2		3	C	6								
	406	Power Stations and Substations	EN.406.DS.DI	C4							2	1	2	2	E		5	
	407	Relay Protection	ISE.407.DS.DI								2	1			C		3	
	408	High Voltage Engineering II	ISE.408.DS.DI	C5							2	3		2	E		5	
	409	Power Systems II	ISE.409.DS.DI	C7							1		1	1	C		2	
	410	Diploma Project Preparation	ISE.410.DS.DI										7	6	C		6	
	411	Practice for Diploma Project Drafting, 3 weeks x 40 h/week = 120 h*	ISE.411.DS.DI												C		4	
415	Diploma project defend**	ISE.415.DS.DI												E		10		
DO	412	Optimal Strategies and Decisions in Power Engineering	EN.412.1.DID.DO															
		Operational Research	EN.412.2.DID.DO								3	2		2	E		5	
DL	413	Industrial Project Management	EN.413.DID.DL		1			2	C	3								
	414	Monitoring and Diagnosis of Power Equipment	EN.414.DID.DL		2	2			C	4								
Total hours per week, total tests number per semester and total credits per semester, for DI and DO					13	0	10	2	15	4E 1C	30	10	0	7	10	13	3E 4C	30

*It is accomplished at the diploma co-ordinator, who makes also the evaluation.

**The 10 credits are granted only after a successful defend of the diploma project.

Conditionnings	Previous compulsory discipline	
	Title	Code
C1	Electricity Transmission and Distribution I	UTI.EH.EN.309.DID.DI
C2	Automatic Control Elements	UTI.EH.EN.307.DID.DI
C3	Electrical Materials	UTI.EH.EN.214.2.DID.DO
C4	Electrical Part of Power Plants	UTI.EH.EN.310.DID.DI
C5	High Voltage Engineering I	UTI.EH.EN.ISE.403.DS.DI
C6	Electricity Transmission and Distribution II	UTI.EH.EN.ISE.401.DID.DI
C7	Power Systems I	UTI.EH.EN.ISE.404.DS.DI

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