

ELECTRICAL ENERGY AND ELECTRICITY SUPPLY

CURRICULUM

BACHELOR, FULL-TIME TRAINING
(course projects are included in the curriculum)

Year	Semester	Number	Subject Code	Full name of the subjects (course projects, practical training)	Form of control E/PCA	Teaching		Total hours weekly	Total hours for The semester	ECTS	
						Hours					
						L	Y/C				
FIRST	First	1	361101	Mathematics – Part I	E	2	3	5	65	5.8	
		2	361102	Mathematics – Part II	E	3	4	7	91	8.1	
		3	351101	Science of Machines	E	2	2	4	52	4.6	
		4	351111	Technical Documentation + course project	PCA	1	4	5	65	5.8	
		5	4212xx	Foreign Language (eligible) *				4	52	4.6	
		<i>First semester</i>								325	
		431143	Sport – 2 hours weekly	PCA					26	1	
		First semester TOTALLY:									30.0
	Second	1	361103	Mathematics – Part III	E	3	3	6	84	6.0	
		2	181101	Physics	E	4	3	7	98	7.0	
		3	341101	Electrical Engineering Theory–Part I	E	3	2	5	70	5.0	
		4	371103	Programming + course project	PCA	2	4	6	84	6.0	
		5	4212xx	Foreign Language (eligible) *	PCA		2	2	28	2.0	
		<i>Second semester</i>								364	
		431143	Sport – 2 hours weekly	PCA					28	1	
		371147	Practical Training on Informatics	PCA					60	2	
	321112	Educational Practical Training on Mining Technologies						30	1		
	Second semester TOTALLY:									30.0	
	<i>Total for the first year</i>								689	60	

NOTE: First academic semester - 13 weeks

Second academic semester -14 weeks

Year	Semester	No. ber	Subject Code	Full name of the subjects (course projects, practical training)	Form of control E/PCA	Teaching Hours		Total hours weekly	Total hours for the semester	ECTS	
						L	PE				
THIRD	First	1	341111	Electrical Machines – Part II	E	3	4	7	98	8.1	
		2	321101	Electrical Devices + course project	E	2	3	5	70	5.8	
		3	311114	Hydraulic and Pneumatic Engineering	E	3	2	5	70	5.8	
		4	321102	Electrical Networks and Systems + course project	E	3	3	6	84	6.9	
		5	311116	Technique and Technologies of Mineral Processing	E	2	1	3	42	3.5	
			<i>First semester</i>							364	30.0
	Second	1	331101	Automated Electrical Drive	E	4	2	6	84	6.2	
				Electrical Part of Electric Power Stations and Substations + course project	E	3	3	6	84	6.2	
		2	321103	Lighting and Network Engineering	E	3	2	5	70	5.2	
		3	321104	Digital and Microprocessor Technique + course project	E	2	2	4	56	4.2	
		4	311117	Mining Technique	E	3	2	5	70	5.2	
				<i>Second semester</i>							364
			311113	Practical Training on Electricity Supply and Electrical Equipment					90	3	
				Second semester TOTALLY							
			<i>Total for the third year:</i>							728	60

NOTE

First academic semester - 13 weeks
 Second academic semester -14 weeks

Year	Semester	N ^o	Subject Code	Full name of the subjects (course projects, practical training)	Form of control E/PCA	Teaching			ECTS	
						Hours	Total hours weekly	Total hours for the semester		
FOURTH	First	1	321105	Electricity Supply	E	4	6	78	6.9	
		2	331108	Electrical Equipment + course project	E	4	7	91	8.1	
		3	321109	Electrical Equipment of Explosive Production	E	2	3	39	3.5	
		4	271119	Economics and Management	E	4	6	78	6.9	
		5	321107	Electricity Safety in Industry	PCA	2	4	52	4.6	
	<i>First semester:</i>								338	30.0
	Seco nd	1	261102	Technical Safety	PCA	2	3	39	4.1	
		2	321108	Installation and Exploitation of Electrical Equipment	E	3	4	52	5.5	
		3	321106	Communication Systems	E	3	5	65	6.9	
		4	331122	Principles of Automation	E	3	5	65	6.9	
		5	3212XX	Special Subject (eligible)***	E	3	4	52	5.5	
<i>Second semester:</i>								273	29.0	
Pre-diploma Practical Training								30	1	
Second semester TOTALLY									30.0	
<i>Total for the fourth year:</i>								611	60	
	6	321114	Diploma paper			3	3	39	10	

NOTE

First academic semester - 13 weeks
 Second academic semester -14 weeks

III. Eligible Subjects:

*	421201	English Language	
*	421202	German Language	
*	21203	Russian Language	
*	421204	French Language	
**	411202	Logics	
**	411206	Culturology	
**	411201	History of Philosophy	
***	321210	Electricity Supply and Electrical Equipment for Transport and Storage of Oil and Gas	
***	321211	Restorable Energy Sources	
***	311215	Electrical Transport	

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CURRICULUM

MASTER, FULL-TIME TRAINING

(course projects are included in the curriculum)

Year	Semester	No	Subject Code	Full name of the subjects (course projects, practical training)	Form of control E/PCA	Teaching		Total hours weekly	Total hours for the semester	ECTS		
						Hours						
						L	PE					
FIRST	First	1	362107	Mathematical Methods in Technique	E	3	2	5	75	6.5		
		2	*	Information Technologies (eligible) * + course project	PCA	2	4	6	90	7.8		
		3	332136	Control of Electric Drive in Mines	E	3	2	5	75	6.5		
		4	322120	Technique of High Voltage + course project	E	2	1	3	45	3.9		
		5	322121	Energy Technologies with Restorable Energy Sources + course project	E	3	1	4	60	5.2		
		<i>First semester:</i>						13	10	23	345	30.0
	Second	1	322122	Optimization of Power Supply in Enterprises + course project	E	3	2	5	75	6.3		
		2	322123	Explosion Protection Equipment and Explosion Protection Systems	E	2	2	4	60	5.0		
		3	322124	Energy Saving in Mines + course project	E	3	2	5	75	6.3		
		4	322125	Transient Processes in Power Supply Systems	E	2	2	4	60	5.0		
		5	322126	Research Project			4	4	60	5.0		
			32 21 27	Specialized Practical Training	PCA				30	2.5		
		<i>Second semester:</i>						7	10	17	360	30.0
		<i>Total for the first year:</i>									705	60

NOTE: First academic semester - 15 weeks

Second academic semester - 15 weeks

Year	Semester	No	Subject Code	Full name of the subjects (course projects, practical training)	Form of control E/PCA	Teaching		Total hours weekly	Total hours for the semester	ECTS	
						Hours					
						L	Y/C				
SECOND	D	First	1	4222XX	Foreign Language (eligible)**	PCA		6	6	90	13.8
			2	***	Eligible***	TO	3	1	4	60	9.2
			3	32 21 28	Electrostatic Charge and Explosion Protection	TO	2	1	3	45	6.9
					<i>First semester:</i>					195	30
		4	322120	Diploma Paper - consultations			6	6	90	15	
					<i>Total for the second year:</i>					285	45
					Diploma Practical Training (if necessary)					60	9.5

NOTE:

First academic semester - 15 weeks

*	32 22 19	Application Computer Programs
*	372228	Control Systems in Administrative and Economic Activities
*	372204	Computer Networks and Communications
*	3722xx	Programming Language C++
**	422201	English Language
**	422202	German Language
**	422203	Russian Language
**	422204	French language
***	272248	Management and Marketing
***	4122XX	Bases of Law

