

Ministry of Science and Education of the Republic of Azerbaijan
Azerbaijan State Oil and Industry University
Publik Legal Entity



"Confirm"
Acting Rector

assoc. prof. Vazeh Askerov

09 2023

Specialty: 050608- "Energy engineering"
Duration of study: 4 years (8semesters)

EDUCATION PLAN
(bachelor's level)

I. SCHEDULE OF EDUCATIONAL PROCESS

Courses	September				October				November				December				January				February				March				April				May				June				July				August			
	1	8	15	22	6	13	20	27	3	10	17	24	1	8	15	22	5	12	19	26	2	9	16	23	2	9	16	23	6	13	20	27	4	11	18	25	1	8	15	22	6	13	20	27	2	9	16	23
I																																																
II	=	=																																														
III	=	=																																														
IV	=	=																																														

Legend: Certification Theoretical Preparation Examination Session Internship Holidays Final State

II. PLAN OF EDUCATIONAL PROCESS

№	Subject Code	Subject Name	Credit Amoun	Total Hours	Out of class Hours	Classroom hours			C.W C.P.	Prerequisite Subject code	Correctvisit Subject code	Semester	Weekly class Hours	
						Total	Lecture	Seminar						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	HS-B00	Humanitarian subjects	30	900	480	420	75	345						
1	HS-B01	Azerbaijan history	5	150	90	60	30	30					1	4
2	HS-B02.1	Business and academic communication in a foreign language: General English	4	120	60	60		60					1	4
3	HS-B02.2	Business and academic communication in a foreign language: Speech Practice – Development of speech skills	4	120	60	60		60					2	4
4	HS-B02.3	Business and academic communication in a foreign language: Academic Vocabulary and Reading	4	120	60	60		60					3	4
5	HS-B02.4	Business and academic communication in a foreign language: Social Communication Skills	3	90	45	45		45					4	3
6	HS-B03	Business and Academic Communication in Azerbaijani Language	4	120	75	45		45					2	3
		Elective Subjects	6	180	90	90	45	45						
7	HES-B04	Block I: 1) Philosophy ; 2) Sociology; 3) Constitution of the Republic of Azerbaijan and on the basis of law; 4) Logic; 5) Ethics and aesthetics; 6) Introduction to multiculturalism	3	90	45	45	15	30					5	3
8	HES-B05	Block II: 1) Information technology (by specialty) ; 2) Information management; 3) Fundamentals of Entrepreneurship and an Introduction to Business; 4) Political science	3	90	45	45	30	15					5	3
	VSS-B00	Vocational training subjects of speciality	180	5400	3525	1875	1080	405	390					
			120	3600	2340	1260	750	270	240					
9	VSS-B01	Linear Algebra and Analytic Geometry	5	150	105	45	30	15					1	3
10	VSS-B02	Calculus - 1	4	120	75	45	30	15					1	3
11	VSS-B03	Calculus- 2	5	150	105	45	30	15		VSS-B02			2	3
12	VSS-B04	Differential Equations	5	150	105	45	30	15					3	3
13	VSS-B05	Theory of Probability and Mathematical Statistics	4	120	75	45	30	15					4	3
14	VSS-B06	Physics -1	6	180	120	60	30	15	15				1	4
15	VSS-B07	Physics -2	6	180	120	60	30	15	15	VSS-B06			2	4
16	VSS-B08	Applied Physics : Electromagnetic Field Theory	6	180	120	60	30	15	15				3	4
17	VSS-B09	Chemistry	6	180	120	60	30	30					1	4
18	VSS-B10	Electrical circuit theory -1	6	180	120	60	30	15	15				3	4
19	VSS-B11	Electrical circuit theory -2	5	150	90	60	30	15	15	VSS-B10			4	4
20	VSS-B12	Applied mechanics	6	180	120	60	30	30					2	4
21	VSS-B13	Engineer - computer graphics	5	150	90	60	30	30					2	4
22	VSS-B14	Civil Defense	3	90	45	45	30		15				5	3
23	VSS-B15	Energy materials	3	90	45	45	30		15				4	3
24	VSS-B16	Electrical machines	8	240	165	75	45	15	15				5	5
25	VSS-B17	Funtamentals of Energy	9	270	180	90	60	30	30				3	6
26	VSS-B18	Technology of energy production	7	210	120	90	60	15	15				6	6
27	VSS-B19	Technical thermodynamics and heat transfer	7	210	135	75	45	15	15				4	5
28	VSS-B20	Protection of the electrical system and devices	7	210	150	60	45		15				5	4
29	VSS-B21	Electrical energy generation, transmission and distribution	7	210	135	75	45	15	15	CW			6	5
		Elective subjects (vocational training)	60	1800	1185	615	330	135	150					
		Block I:												
30	VTES-B01	1)Electrical equipment of power stations and substations; 2) Electrical part of power stations 3) Heat engines; 4)Steam, gas turbines and internal combustion engines	7	210	135	75	45	15	15	CP			6	5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
31	VTES-B02	Block II: 1) Fundamentals of the Electrical supply; 2) Modeling of electrical systems and computer simulation; 3) Heating, cooling and air conditioning systems; 4) Cogeneration systems and heating networks;	7	210	150	60	30	15	15				6	4
32	VTES-B03	Block III: 1) Automation of the electrical systems; 2) Control of the Electrical system Modes 3) Economic issues of energy; 4) Energy management	8	240	165	75	45	-	30				7	5
33	VTES-B04	Block IV: 1) Operation of electrical systems; 2) Electrical systems, operation and monitoring 3) Technologies for the production of solar and wind energy; 4) Renewable energy technologies	6	180	120	60	30	15	15				5	4
34	VTES-B05	Block V: 1) Transient processes in the electrical systems; 2) Short circuits in the electrical systems 3) Steam generators; 4) Boiler equipments ;	7	210	120	90	45	15	30	CW			7	6
35	VTES-B06	Block VI: 1) Modes of the electrical systems; 2) Modes of power stations and grids 3) Auxiliary equipment for thermal power plants; 4) Operation of thermal power plants;	8	240	150	90	45	15	30				7	6
36	VTES-B07	Block VII: 1) Renewable electrical energy sources; 2) Smart technologies in energy engineering (Smart energy systems); 3) Water treatment and membrane in thermal energy technologies; 4) Chemical water regimes in thermal energy;	8	240	180	60	30	15	15	CW			4	4
37	VTES-B08	Block VIII: 1) Technical foreign language; 2) Fuzzy logic	4	120	90	30		30					7	2
38	VTES-B09	Block IX: 1) Labour protection and safety in industry	2	60	30	30	30						6	2
39	VTES-B10	Block X: 1) Projects management	3	90	45	45	30	15					7	3

III. TRAINING TIME (weeks)

Study Year	Theoretical training	Exam Session	Internship	Final State Certification	Holidays	Total
I	30	10	-	-	12	52
II	30	10	-	-	12	52
III	30	10	-	-	12	52
IV	15	5	14	6	2	42
Cemi	105	35	14	6	38	198

IV. LEARNING PROCESS INDICATORS

Semester	1	2	3	4	5	6	7	8		Total
								Practics	Prep. and defense of grad.thesis	
Amount of Credits	30	30	30	30	30	30	30	21	9	240
Number of exams	6	6	5	6	6	5	5	39		
Number of hours per week	22	22	21	22	22	22	22			

Presented by:

Vice-rector for academic affairs

Dean of faculty power engineering

Head of the department of "Energy technologies"

Head of the department of "Power Engineering"






associate professor G.A.Mammadov

associate professor A.G. Aliyev

associate professor Sh.N. Nasirov

associate professor S.M. Mirzayeva