

MINISTRY OF SCIENCE AND EDUCATION REPUBLIC OF AZERBAIJAN
"AZERBAIJAN STATE OIL AND INDUSTRY UNIVERSITY" PLE



Assoc. Prof. Vazeh Askerov
2023

Specialty: 050634 - Process Automation Engineering

Duration of study: 4 years (8 semestr)

CURRICULUM
(the bachelor level)

I. SCHEDULE OF THE EDUCATIONAL PROCESS

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

Conventional signs: Theoretical training □ Examination session □ Practice □ Final State Attestation □ Holidays □

II. THE PLAN OF EDUCATIONAL PROCESS

№-	Subject code	The subject name	Credi	Total hours	Out of Audienc hours	Audienc hours			C.W	Prerequi- sites	Coreqi- sites	Term	Weekly tea- teaching hours	
						Total	Including by types of training							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	HS-B00	The Humanities Subjects	30	900	495	405	105	300						
1	HS-B01	Azerbaijan history	5	150	90	60	30	30					3	4
2	HS-B02.1	Foreign Language: General English and Speech Practice	7	210	105	105		105					1	7
3	HS-B02.2	Foreign Language: Academic vocabulary and reading. Social communication skills	8	240	120	120		120					2	8
4	HS-B03	Business and academic communication in the Azerbaijani language	4	120	75	45	15	30					4	3
		Elective subjects	6	180	105	75	60	15						
5	HSE-B04	Block I: 1) Philosophy; 2) Sociology; 3) Constitution of the Republic of Azerbaijan and bases of law; 4) Ethics and esthetics; 5) Logic; 6) Introduction to multiculturalism	3	90	45	45	30	15					3	3
6	HSE-B05	Block II: 1) Information technology; 2) Information management; 3) Basics of entrepreneurship and introduction to business 4) Political science	3	90	60	30	30						4	2
	VSS-B00	Vocational training Subjects by specialty	180	5400	3510	1890	1020	375	495					
			120	3600	2295	1305	720	255	330					
7	VSS-B01	Linear algebra and analytical geometry	4	120	60	60	30	30					1	4
8	VSS-B02	Calculus -1	4	120	60	60	30	30					2	4
9	VSS-B03	Calculus-2	4	120	60	60	30	30			VSS-B02		3	4
10	VSS-B04	Applied mathematics	4	120	75	45	30	15					4	3
11	VSS-B05	Basics of physics	6	180	120	60	30	15	15				1	4
12	VSS-B06	Applied physics	6	180	135	45	30		15				2	3
13	VSS-B07	Chemistry	5	150	105	45	30		15				1	3
14	VSS-B08	Circuit theory -1	6	180	135	45	30		15				3	3
15	VSS-B09	Circuit theory -2	5	150	105	45	30		15		VSS-B08		4	3
16	VSS-B10	Engineering mechanics	6	180	120	60	45	15					5	4
17	VSS-B11	Engineer and computer graphics	6	180	120	60	30	30					2	4
18	VSS-B12	Civil defense	3	90	60	30	15		15				5	2
19	VSS-B13	Basics of measurement techniques	6	180	120	60	30		30				3	4
20	VSS-B14	Analog electronics	6	180	105	75	45		30				4	5
21	VSS-B15	Digital electronics	6	180	105	75	45		30				5	5
22	VSS-B16	Computer technology and programming	7	210	150	60	30	15	15				1	4
23	VSS-B17	Automatic control theory	8	240	165	75	45	15	15				4	5
24	VSS-B18	Microprocessors and programmable integrated circuits	7	210	120	90	45	15	30				6	6
25	VSS-B19	Programmable logic controllers (PLC)	7	210	120	90	45	15	30				6	6
26	VSS-B20	Industrial automation	7	210	120	90	45	15	30	C.P			7	6
27	VSS-B21	Digital control	7	210	135	75	30	15	30				6	5
		Elective Subjects (Vocational education)	60	1800	1215	585	300	120	165					
28	VSSE-B01	I blok: 1) Sensors and actuators; 2) Industrial sensors; 3)Industrial execution mechanisms	7	210	120	90	45	15	30				5	6
29	VSSE -B02	II blok: 1) Basics of communication and bus systems; 2)Compu-ter networks and buses; 3) Industrial automation buses	7	210	150	60	30		30				3	4
30	VSSE -B03	III blok: 1) Fuzzy logic and control; 2) Soft-computing; 3) Optimal controls	8	240	165	75	30	15	30				7	5
31	VSSE -B04	IVblok: 1) Database and knowledge base; 2) Data structure and algorithms 3) Database management	6	180	135	45	30		15				2	3
32	VSSE -B05	V blok: 1) Digital signal processing; 2) Process modeling and simulation; 3) Process identification	7	210	165	45	30		15				6	3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
33	VSSE -B06	VI blok: 1) Technological processes and devices of electric power; 2) Technological processes and facilities of oil production; 3) Technological processes and facilities of oil refining; 4) Technological processes and devices of mechanical engineering	8	240	165	75	45	15	15				5	5
34	VSSE -B07	VII blok: 1) SCADA systems; 2) Intelligent control systems (smart home projects); 3) Operation, diagnostics and repair of automation devices and systems	9	270	180	90	30	30	30				7	6
35	VSSE -B08	VIII blok: 1) Technical foreign language; 2) Classical and fuzzy logic; 3) Quality control	3	90	60	30		30					7	2
36	VSSE -B09	IX blok: Health safety and Environment (HSE)	2	60	30	30	30						6	2
37	VSSE-B11	X blok: Project management	3	90	45	45	30	15					7	3
Number of Training hours			210	6300	4005	2295	1125	675	495					

III.DURATION OF TRAINING (in weeks)

Academic year	Theoretical training	Examination session	Practice	Final state attestation	Holidays	Total
I	30	10	-	-	12	52
II	30	10	-	-	12	52
III	30	10	-	-	12	52
IV	15	5	14	6	2	42
Total	105	35	14	6	38	198

IV. INDICATORS OF EDUCATION PROCESS

Semester	1	2	3	4	5	6	7	8		Total
								Practice	Preparation and defense of the final work	
Number of credits	29	30	31	30	30	30	30	21	9	240
Number of Examines	5	5	6	6	5	5	5			37
Hours per weeks	22	22	22	21	22	22	22			

SUBMITTED BY:

Vice-rector for educational affairs



Associate professor G.A.Mammadov

Dean of faculty of "Information Technology and Control"



Associate professor F.H.Agayev

Head of the department of "Electronics and automation"



Associate professor A.V. Alizadeh