

MINISTRY OF SCIENCE AND EDUCATION OF THE AZERBAIJAN REPUBLIC
 "AZERBAIJAN STATE OIL AND INDUSTRY UNIVERSITY" PUBLIC LEGAL ENTITY

"Approved"
 acting rector



Assoc. prof. Məzən Askarov

"21" September 2023

Specialty : 050616 - Information technologies
 Duration of study is 4 year (8 semesters)

CURRICULUM
 (for bachelor's level)

I. SCHEDULE OF THE 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																																																

Conventional symbols Theoretical training Examination Session Experience Vacation

□ □ □ □ □

II. EDUCATIONAL PROCESS PLAN

Row №	Subject code	Subject Name	Credits number	Total hours	Out-of-class hours	Total hours for classroom	Auditorium hours			Course work / Course Project	Prerequisite (the disciplines that are required to be taught)	Corequisite (the disciplines with parallel learning)	Semester where the subject is taught	Weekly Workload
							Including the type of training							
							Lecture	Seminar	Laboratory					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	HS-BOO	Humanitarian subjects	30	900	480	420	105	315						
1	HS-B01	History of Azerbaijan	5	150	90	60	30	30					2	4
2	HS-B02.1	Foreign Language: General English and Speech Practice	8	240	120	120		120					1	8
3	HS-B02.2	Foreign Language: Academic vocabulary and reading. Social communication skills	7	210	105	105		105					2	7
4	HS-B03	Business and academic communication in Azerbaijani	4	120	75	45	15	30					4	3
		Elective subjects	6	180	90	90	60	30						
5	HES-B04	Block I: 1) Philosophy 2) Sociology; 3) Consultation of the Republic of Azerbaijan and foundations of law; 4) Ethics and aesthetics; 5) Logics; 6) Introduction to multiculturalism	3	90	45	45	30	15					4	3
6	HES-B05	Block II: 1) Information technology (by specialty); 2) Information management; 3) Fundamentals of Entrepreneurship and Introduction to Business; 4) Political science	3	90	45	45	30	15					6	3
	VSS-BOO	Vocational training subjects by speciality	180	5400	3540	1860	990	510	360					
			120	3600	2355	1245	660	315	270					
7	VSS-B01	Linear algebra and analytical geometry	3	90	45	45	30	15					1	3
8	VSS-B02.1	Calculus - 1	3	90	45	45	30	15					1	3
9	VSS-B02.2	Calculus - 2	4	120	60	60	30	30			VSS-B02.1		2	4
10	VSS-B03	Discrete mathematics	3	90	45	45	30	15					3	3
11	VSS-B04	Differential equations	3	90	45	45	30	15					4	3
12	VSS-B05	Probability theory and mathematical statistics	3	90	45	45	30	15					5	3
13	VSS-B06	Physics	5	150	90	60	30	15	15				3	4
14	VSS-B07	Fundamentals of information technology	8	240	180	60	30	30					1	4
15	VSS-B08	Fundamentals of programming	6	180	120	60	30	30	30				1	4
16	VSS-B09	Modern programming languages	6	180	120	60	30	30	30				2	4
17	VSS-B10	Computer architecture	8	240	180	60	30	30					2	4
18	VSS-B11	Data structure and algorithms	7	210	150	60	30	30	30				3	4
19	VSS-B12	Database systems	7	210	135	75	30	15	30	CW			4	5
20	VSS-B13	Operating systems	6	180	120	60	30	30					3	4
21	VSS-B14	Multimedia technologies	6	180	120	60	30	30					3	4
22	VSS-B15	Information security	6	180	120	60	30	30					5	4
23	VSS-B16	Human-computer interface	7	210	150	60	30	30	30				6	4
24	VSS-B17	Computer networks	8	240	180	60	30	30	30				4	4
25	VSS-B18	Artificial intelligence	6	180	120	60	30	30	30				5	4
26	VSS-B19	Web systems and technologies	7	210	135	75	30	15	30	CW			6	5
27	VSS-B20	IT project management	5	150	105	45	30	15	15				4	3
28	VSS-B21	Civil defense	3	90	45	45	30	15					5	3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	SPEE-BO0	Elective subjects (Vocational education)	60	1800	1185	615	330	195	90					
29	SPEE-B01	Block I: 1) System analysis and modeling; 2) Analytical data processing; 3) Soft Computing technology	7	210	135	75	30	30	15				7	5
30	SPEE-B02	Block II: 1) Object-oriented programming; 2) Application programming; 3) Python programming	6	180	120	60	30		30				6	4
31	SPEE-B03	Block III: 1) Software design; 2) IT infrastructure; 3) Organization and management of IT resources	5	150	105	45	30		15				6	3
32	SPEE-B04	Block IV: 1) Technology and innovation management; 2) Decision making science; 3) Information technologies and systems in management	6	180	120	60	30	30					5	4
33	SPEE-B05	Block V: 1) Big data processing technologies; 2) Analysis of intellectual data; 3) Mathematical elements of information technology	5	150	105	45	30	15					7	3
34	SPEE-B06	Block VI: 1) Internet of Things; 2) Sensors and actuators; 3) Cyber systems	5	150	105	45	30	15					7	3
35	SPEE-B07	Block VII: 1) Cloud technologies; 2) Mobile technologies; 3) Internet technologies	6	180	120	60	30	30					5	4
36	SPEE-B08	Block VIII: 1) Geographical information systems; 2) Corporate information systems; 3) Modeling in information technology	7	210	135	75	30	15	30				7	5
37	SPEE-B09	Block IX: 1) Cyber-physical systems; 2) Neural networks; 3) Fuzzy logic	5	150	105	45	30	15					3	3
38	SPEE-B10	Block X: 1) Technical foreign language; 2) Classical and fuzzy-logic	3	90	60	30		30					7	2
39	SPEE-B11	Block XI: HOSEP (Health, occupational safety and environmental protection)	2	60	30	30	30						6	2
40	SPEE-B12	Block XII: Project Management	3	90	45	45	30	15					7	3
	Total		210	6300	4020	2280	1095	825	360					

III. DURATION OF TRAINING (IN WEEKS)

Education year	Theoretical training	Examination session	Practice	Vacation	Total
I	30	10	-	12	52
II	30	10	-	12	52
III	30	10	-	12	52
IV	15	5	20	2	42
Total	105	35	20	38	198

IV. INDICATORS OF EDUCATION PROCESS

Semester	1	2	3	4	5	6	7	8	Total
								Experience	
Credits number	28	30	32	30	30	30	30	30	240
Examinations number	5	5	6	6	6	6	6		40
Hours per week	22	23	22	21	22	21	21		

Presented by:

Vice Rector for Academic Affairs

Dean of the Information Technology and Control Faculty

Head of "Computer Engineering" department



associate professor G.A. Mammadov



associate professor F.H. Aghayev



associate professor N.A. Rahimova