



APPROVED  
Chairman of the Board  
Rector of Satbayev University  
Begentayev M.M.  
2022 y.

**MAJOR CURRICULUM**  
for 2020-2021 academic year admission  
Educational program 6B07301 / 6B02101 - "Architecture and design"  
Group of Educational programs B073 - "Architecture" / B031 - "Fashion, interior design and industrial design"

Full-time: study Study duration: 5 years

Academic degree: Bachelor of Engineering and Technology / of Arts

Year of study	Code	Name of discipline	Cycle	Total Credits	Total hours	classroom volume lect/lab/pr/SW	IVMS (including IVMSI), in hours	Prerequisites	
<b>1 semester (autumn 2020)</b>									
1	LNG1051	Beginner (A1)	G	6	150	0/0/3	105	Diagnostic test	
	LNG1052	Elementary English (A1)							
	LNG1053	General English 1 (A2)							
	LNG1054	General English 2 (A2)							
	LNG1055	Academic English (B1)							
	LNG1056	Business English (B2)	G	6	150	0/0/3	105	Diagnostic test	
	LNG10121	Kazakh/Russian (A2)							
	LNG10122	Academic Kazakh/Russian (B1)							
	LNG10123	Business Kazakh/Russian (B2)							
	MAT00110	Algebra and introduction to calculus							
MAT163	Analytical geometry	B	6	150	1/0/2	105	Diagnostic test		
ARC436	Introduction to the specialty (Architecture and design)								
ARC155	Drawing I								
GEN101	Engineering and Computer Graphics								
KFK101	Physical education I								
<b>In total</b>				<b>38</b>	<b>23</b>				
<b>2 semester (spring 2021)</b>									
	LNG1052	Elementary English (A1)	G	6	150	0/0/3	105		
	LNG1053	General English 1 (A2)							
	LNG1054	General English 2 (A2)							
	LNG1055	Academic English (B1)							
	LNG1056	Business English (B2)							
	LNG1057	Professional English (B2+)	G	6	150	1/0/2	105		
	LNG107	Academic Kazakh/Russian (B1)							
	LNG107	Business Kazakh language (Advanced Russian language) (B2)							
	I101	Elective							
	ARC156	Drawing II							
ARC113	Architectural drawing	B	6	150	0/0/3	105	ARC155		
ARC104	Architectural composition								
ARC157	Sculpture								
HUM100	Contemporary History of Kazakhstan								
KFK102	Physical education II								
<b>In total</b>				<b>38</b>	<b>21</b>				
<b>3 semester (autumn 2021)</b>									
2	ARC413	Art culture of Kazakhstan	B	5	150	2/0/1	105		
	HUM126	Social-political knowledge	G	8	180	4/0/0	135	no	
	HUM132	Philosophy	G	5	150	1/0/2	105	no	
	CIV199	Engineering mechanics	B	5	150	1/0/2	105	MAT00110	
	ARC506	Design I	B	5	150	0/0/3	105	ARC104	
	ARC505	Painting	B	5	150	0/0/3	105	ARC156	
	AAP122	Physical education III	G	2	60	0/0/2	30		
<b>In total</b>				<b>35</b>	<b>21</b>				
<b>4 semester (spring 2022)</b>									
	ARC114	World History of Architecture	B	5	150	2/0/1	105		
	CSE677	Information and Communication technology	G	5	150	2/1/0	105	no	
	CIV124	Engineering systems of buildings and structures	B	5	150	2/0/1	105	no	
	CIV164	Building construction	B	5	150	2/0/1	105	CIV199	
	CHE452	Ecology and sustainable development	G	2	60	1/0/0	45		
	2201	Elective	B	5	150	0/0/3	105	ARC450	
	2202	Elective	B	5	150	0/0/3	105	no	
	AAP132	Physical education IV	G	2	60	0/0/2	30		
	<b>In total</b>				<b>34</b>	<b>22</b>			
	<b>5 semester (autumn 2022)</b>								
3	ARC509	Integrated design I	P	5	150	0/0/3	105	ARC451	
	ARC510	Integrated design II	P	5	150	0/0/3	105	ARC451	
	ARC106	Architectural typology	B	5	150	2/0/1	105	ARC104	
	MNG487	Fundamentals of Entrepreneurship, Leadership and Anti-corruption culture	G	3	90	1/0/1	60		
	CHE451	Life safety	G	2	60	1/0/0	45		
	3203	Elective	B	5	150		105		
	3204	Elective	B	5	150		105		
<b>In total</b>				<b>35</b>	<b>18</b>				
<b>6 semester (spring 2023)</b>									
	ARC440	Integrated design III	P	5	150	0/0/3	105	ARC509	
	ARC441	Integrated design IV	P	5	150	0/0/3	105	ARC510	
	3205	Elective	B	5	150		105		
	3206	Elective	B	5	150		105		
	3207	Elective	P	5	150		105		
	3208	Elective	P	5	150		105		
	<b>In total</b>				<b>30</b>	<b>18</b>			
<b>7 semester (autumn 2023)</b>									
4	ARC442	Integrated design V	P	5	150	0/0/3	105	ARC440	
	ARC443	Integrated design VI	P	5	150	0/0/3	105	ARC441	
	4209	Elective	B	5	150		105		
	4210	Elective	B	5	150		105		
	4211	Elective	B	5	150		105		
<b>In total</b>				<b>30</b>	<b>18</b>				
<b>8 semester (spring 2024)</b>									
	ARC444	Integrated design VII	P	5	150	0/0/3	105	ARC442	
	ARC445	Integrated design VIII	P	5	150	0/0/3	105	ARC443	
	ARC132	Basis of BIM-technology	P	5	150	0/0/3	105	ARC143	
	4313	Elective	P	5	150		105		
	4214	Elective	B	5	150		105		
<b>In total</b>				<b>30</b>	<b>18</b>				
<b>9 semester (autumn 2024)</b>									
5	5316	Elective	P	5	150		105		
	5317	Elective	P	5	150		105		
	5318	Elective	P	5	150		105		
	5319	Elective	P	5	150		105		
	5320	Elective	P	5	150		105		
<b>In total</b>				<b>30</b>	<b>18</b>				
<b>10 semester (spring 2025)</b>									
	ECA003	Preparation and writing of the thesis (project)	FA	6					
	ECA103	Graduate thesis (project) defense	FA	6					
<b>In total</b>				<b>12</b>					

Year of study	Code	Name of discipline	Cycle	Credits	Recommended semester
Obligatory education with P/NP assessment					
1	AAP101	Training Practice	B	1	2
2	AAP112	Training Practice II	B	1	4
3	AAP109	Industrial internship I	B	1	6
4	AAP158	Industrial internship II	P	2	8
Additional types of training					
1	AAP107	Educational field geological internship	G	0	5-7
2-4	AAP500	Military training	B	0	3-6

Total number of credits			
Cycle of disciplines	Credits		
	compulsory	elective	total
Cycle of general disciplines (G)	63		63
Cycle of basic disciplines (B)	76	71	147
The cycle of profiling disciplines (P)	47	45	92
<b>Total of theoretical study: 186 116 302</b>			
Final attestation (FA)	12	0	12
<b>Total: 12 0 12</b>			
<b>OVERALL: 198 116 314</b>			

Decision of the Academic Council Satbayev University Minutes # 3, dated "15" 09 2020

Decision of the Academic Council of the IA&CI after T.K.Basenov. Minutes # 2, dated "10" 12 2020

Vice-Rector for Academic Affairs

Director of IA&C after T.K.Basenov

Head of department "Architecture"

Representative of the Specialty Council

Zhautikov B.A.  
Kuspangaliev B.U.  
Khojikov A.V.  
Karmanov Sh.D.





**CATALOG OF ELECTIVE DISCIPLINES**  
 Educational program 6B07301 / 6B02101 - "Architecture and design"  
 Group of Educational programs B073 - "Architecture" / B031 - "Fashion, interior design and industrial design"

Full-time: study      Study duration: 5 years      Academic degree: Bachelor of Engineering and Technology / of Arts

Year of study	Element code for curriculum	Code of discipline	Specialization area	Name of the discipline	Cycle	Credits	lec/lab/per IWS	Prerequisites
<b>2 semester (spring 2021)</b>								
1	1101	LNG103	Architecture and design	The culture of business communication (C1)	G	4	0/0/2	
		LNG102		Rhetoric (C1)				
						<b>Total:</b>	<b>4</b>	
<b>4 semester (spring 2022)</b>								
2	2201	ARC174	Architecture	Regional aspects of architecture	B	5	2/0/1	
		ARC413	Graphic design	Art culture of Kazakhstan				
			Industrial Design					
			Architectural design					
	Landscape design							
	2202	ARC508	Architecture	Architectural coloristics and lighting	B	5	1/0/2	
		ARC466	Graphic design	Light-color organization of the environment				
		Industrial Design						
		ARC467	Architectural design	Color Light Modeling				
							<b>Total:</b>	<b>10</b>
<b>5 semester (autumn 2022)</b>								
3202	ARC410	Architecture	Photographica	B	5	1/0/2		
		Graphic design						
	ARC187	Industrial Design	The Visual Culture Basics					
		Architectural design						
3203	ARC149	Architecture	Reconstruction of Asian monuments	B	5	0/0/3		
	ARC488	Graphic design	TV design					
	ARC489	Industrial Design	Regional Design					
	ARC490	Landscape design	Reconstruction of landscape architecture objects					
3204	ARC115	Architecture	Urban design	B	5	2/0/1		
	ARC452	Graphic design	Calligraphy and typography					
	ARC453	Industrial Design	History of design, science and technology					
	ARC185	Architectural design	Interior History					
						<b>Total:</b>	<b>15</b>	
<b>6 semester (spring 2023)</b>								
3	3205	ARC145	Architecture	Professional modeling in the architecture IV	P	5	0/0/3	
		ARC476	Graphic design	Digital Simulation I				
			Industrial Design					
	ARC477	Architectural design	Modeling technologies in design I					
		Landscape design						
	3206	ARC152	Architecture	Reconstruction and modernization of buildings and complexes	P	5	1/0/2	
		ARC463	Graphic design	Design and advertising technologies				
		ARC464	Industrial Design	Typology of industrial design				
		ARC180	Architectural design	Typology of the architectural environment				
		ARC479	Landscape design	Landscape science				
3207	ARC183	Architecture	Modern materials in design	B	5	2/0/1		
		Graphic design						
		Industrial Design						
		Architectural design						
3208	ARC456	Architecture	Aesthetics in architecture	B	5	1/0/2		
		Graphic design						
	ARC457	Industrial Design	Polygraphic design					
		Architectural design						
		Landscape design						
ARC459	Landscape design	Decorative plant growing						
						<b>Total:</b>	<b>20</b>	

7 semester (autumn 2023)								
4209	ARC478	Architecture	The principles of sustainable architecture	P	5	2/0/1		
	ARC460	Graphic design	Package design					
	ARC461	Industrial Design	Ergonomics					
		Architectural design						
ARC462	Landscape design	Urbocology						
4210	ARC130	Architecture	The methodology design of architectural objects	P	5	0/0/3		
	ARC468	Graphic design	Web Design I					
	ARC469	Industrial Design	Special equipment for environment I					
	ARC470	Architectural design	Equipment for recreational urban areas					
	ARC471	Landscape design	Environmental objects of urbanized territories					
4211	ARC146	Architecture	Professional modeling architecture V	P	5	0/0/3		
	ARC480	Graphic design	Special Painting					
		Industrial Design						
		Architectural design						
ARC481	Landscape design	Vertical layout of landscape architecture objects						
4212	ARC117	Architecture	Engineering and transport improvement	P	5	2/0/1		
	ARC465	Graphic design	Digital Simulation II					
	ARC181	Industrial Design	Construction of object design			0/0/3		
	ARC473	Architectural design	Modeling Technologies in Design II					
	ARC474	Landscape design	Design of hydraulic structures in the urban environment					
				Total:	20			
8 semester (spring 2024)								
1313	ARC483	Architecture	Energy Efficient design	P	5	1/0/2		
	ARC458	Architectural design	Ecological Aspects of Design Design					
		Industrial Design						
		Architectural design						
4314	ARC181	Graphic design	Construction of object design	P	5	0/0/3		
	ARC473	Industrial Design	Modeling Technologies in Design II					
		Architectural design						
		Architecture						
ARC474	Landscape design	Design of hydraulic structures in the urban environment						
4315	ARC154	Architecture	Restoration of monuments	P	5	2/0/1		
	ARC484	Graphic design	Web Design II					
	ARC485	Industrial Design	Special environment equipment II			0/0/3		
	ARC486	Architectural design	Special equipment for interior					
	ARC487	Landscape design	Technologies of protection and care of vegetation on objects of landscape architecture					
				Total:	15			
9 semester (autumn 2024)								
5316	ARC135	Architecture	Externship project I	P	5	0/0/3		
		Graphic design						
		Industrial Design						
ARC127	Architectural design	Complex project I						
	Landscape design							
5317	ARC136	Architecture	Externship project II	P	5	0/0/3		
		Graphic design						
	ARC128	Industrial Design	Complex project II					
		Architectural design						
ARC403	Landscape design							
5318	ARC424	Architecture	Pre-project analysis I	P	5	0/0/3		
		Graphic design						
		Industrial Design						
		Architectural design						
ARC404	Landscape design	Pre-project analysis II						
5319	ARC431	Architecture	Pre-project analysis in design II	P	5	0/0/3		
		Graphic design						
		Industrial Design						
		Architectural design						
ARC431	Landscape design							
5320	ARC105	Architecture	Detailed design	P	5	0/0/3		
		Graphic design						
		Industrial Design						
		Architectural design						
		Landscape design						
5321	ARC409	Architecture	Modern regulatory and legal aspects in architecture and urban planning	P	5	2/0/1		
		Graphic design						
		Industrial Design				Production of design objects	0/0/3	
		ARC491				Architectural design		Equipment for urban environment
		ARC492				Landscape design		Complex organization of public spaces
ARC493								
				Total:	30			

Number of credits in elective disciplines for the entire period of study	
Cycles of disciplines	Credits
The cycle of general educational disciplines (G)	
The cycle of basic disciplines (B)	71
The cycle of profiling disciplines (P)	45
OVERALL:	116

Decision of the Academic Council of the IA&CI after T.K.Basenov. Minutes # 2, dated "16" 12 2020.

**Head of department "Architecture"**

  
Khojikov A.V.

**Representative of the Specialty Council**

  
Karmanov Sh.D.