

MINISTRY OF SCIENCES AND HIGHER EDUCATION OF THE REPUBLIC
OF KAZAKHSTAN
M.O. AUEZOV SOUTH KAZAKHSTAN UNIVERSITY

«APPROVED»
Acting Chairman of the Board-Rector
K. Nurmanbetov
« 03 » 2024

EDUCATIONAL PROGRAM


6B07261 – «Innovative textiles, design and decor»

Registration Number	6B0700207
Code and Classification of Education	6B07- Engineering, manufacturing and construction industries
Code and Classification of Areas of Training	6B072- Manufacturing and processing industries
Group of educational programs (EP)	B070- Textiles: clothing, footwear and leather goods
Type of EP	current
ISCE level	6
NQF level	6
IQF level	6
Language learning	English
The complexity of EP	240 credits
Distinctive features of EP	-
Partner University (JEP) -	-
University partner (DDEP) -	-

Developers:

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The EP was considered at a meeting of the Academic Quality Committee of the Textile and food engineering the Higher School, Minutes # 02 «27» 2024 y.

Chairman of the Committee  Khanzharov N.

The EP was considered and recommended for approval at Educational-methodical meeting of M. Auezov SKU Minutes # 4 «18» 02 2024 y.

Chairman of the UMS  K. Sarykulov

The EP was approved by the decision of the Academic Council of the University. Minutes # 10 «28» 03 2024 y.

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1. CONCEPT OF THE PROGRAM

Mission of the University	We are focused on generating new competencies, training a leader who translates research thinking and culture.
University Values	<ul style="list-style-type: none"> – Openness - open to change, innovation and cooperation. – Creativity - generates ideas, develops them and turns them into values – Academic freedom - free to choose, develop and act. – Partnership - creates trust and support in a relationship where everyone wins. – Social responsibility - ready to fulfill obligations, make decisions and be responsible for their results.
Graduate Model	<ul style="list-style-type: none"> – Deep subject knowledge, their application and continuous expansion in professional activity – Information and digital literacy and mobility – Research skills, creativity and emotional intelligence – Entrepreneurship, independence and responsibility for their activities and well-being – Global and national citizenship, tolerance to cultures and languages
Uniqueness of the EP	<ul style="list-style-type: none"> • Orientation to the regional labor market and social order through the formation of professional competencies of the graduate, adjusted to the requirements of stakeholders • Practical orientation and emphasis on the development of critical thinking and entrepreneurship, the formation of a wide range of skills that will allow to be functionally literate and competitive in any life situation and be in demand in the labor market
Academic Integrity and Ethics Policy	<p>The university has taken measures to maintain academic integrity and academic freedom, protection from any type of intolerance and discrimination:</p> <ul style="list-style-type: none"> • Rules of academic integrity (order No. 212 of October 10, 2022); • Anti-corruption standard (order No. 221 n/a dated 12/07/2021). • Code of Ethics (Order No. 212 of October 10, 2022)
Regulatory and legal framework for the development of EP	<ol style="list-style-type: none"> 1. Law of the Republic of Kazakhstan “On Education”; 2. Model rules for the activities of educational organizations implementing educational programs of higher and (or) postgraduate education, approved by order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 30, 2018 No. 595 with amendments and additions dated December 29, 2021. No. 614 3. Standard rules for admission to training in educational organizations implementing educational programs of higher and

	<p>postgraduate education, approved by order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 with amendments and additions dated 06/02/2023. No. 252</p> <p>4. State mandatory standards for higher and postgraduate education, approved by order of the Ministry of Education and Science of July 20, 2022 No. 2;</p> <p>5. Rules for organizing the educational process in credit technology of education, approved by order of the Ministry of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152; with changes and additions from 09/23/2022. No. 79</p> <p>6. Qualification reference book for positions of managers, specialists and other employees, approved by order of the Minister of Labor and Social Protection of the Population of the Republic of Kazakhstan dated December 30, 2020 No. 553.</p> <p>7. Methodological recommendations for introducing ECTS principles into the educational process and expanding academic freedom. Appendix to the order of the Minister of Science and Higher Education. of the Republic of Kazakhstan dated February 12, 2024 No. 57</p> <p>8. Guidelines for the development of educational programs for higher and postgraduate education, Appendix 1 to the order of the Director of the National Center for the Development of Higher Education of the Ministry of Education and Science of the Republic of Kazakhstan dated May 4, 2023 No. 601 n/k</p>
Organization of the educational process	<ul style="list-style-type: none"> – Implementation of the principles of the Bologna Process – Student-centered learning – Availability – Inclusivity
Quality assurance of EP	<ul style="list-style-type: none"> – Internal quality assurance system – Involvement of stakeholders in the development of the EP and its evaluation – Systematic monitoring – Updating the content (updating)
Requirements for applicants	<p>They are established in accordance with the Standard Rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education by order of the Ministry of Education and Science of the Republic of Kazakhstan No. 600 dated October 31, 2018, with changes and additions dated June 2, 2023. No. 252</p>
Conditions for the implementation of educational	<p>For students with SEN (special educational needs) and persons with disabilities (PSI), tactile PVC tiles, specially equipped toilets, a mnemonic diagram, and shower bars have</p>

programs (EP) for persons with disabilities and special educational needs (SSN)

been installed in educational buildings and student dormitories. Special parking spaces have been created. Crawler lift installed. There are desks for people with limited mobility (PLM), signs indicating the direction of movement, ramps. In the educational buildings (main building, building No. 8) there are 2 rooms with six working places adapted for users with disorders of the musculoskeletal system (DMS). For visually impaired users, the SARA™ CE Machine (2 pcs.) is available for scanning and reading books. The library website is adapted for the visually impaired. There is a special NVDA audio program with a service. The JIC website <http://lib.ukgu.kz/> is open 24/7.

An individual differentiated approach is provided for all types of classes and in the organization of the educational process.

2. PASSPORT of the Educational program

Purpose of the EP	Preparation of highly qualified bachelors with the necessary professional and personal competencies, a competitive level of knowledge, skills and professional skills in the field of design, decoration of textile materials and products.
Tasks of the EP	<ul style="list-style-type: none"> - formation of knowledge and skills in the field of entrepreneurship, business development in the technology of production of textile materials and products; - providing them with lifelong learning skills that will enable them to successfully adapt to changing conditions throughout their professional careers; - creating conditions for students to acquire a high general intellectual level of development, mastering competent and developed speech, culture of thinking and skills of scientific organization of work in the textile industry; -the formation of professional competencies in the field of design and decoration of textile materials and products, to ensure the possibility of their employment in the specialty or continuing education at subsequent levels of education. -Establishing conditions for the development of in-demand knowledge and skills, as well as a conscious attitude towards enhancing the welfare of society and conserving the planet within the framework of the SDGs
Harmonization of EP	<ul style="list-style-type: none"> • 6th level of the National Qualifications Framework of the Republic of Kazakhstan; • Dublin descriptors of the 6th level of qualification; • 1 cycle of a Framework for Qualification of the European Higher Education Area); • 6thLevel of European Qualification Framework for Lifelong Learning).
Connection of EP with the professional sphere	<p>The industry qualifications framework in "Light Industry" was approved by the minutes of the meeting of the industry commissions on social partnership and regulation of social and labor relations for the mining and metallurgical, chemical, construction and woodworking industries, light industry and mechanical engineering dated August 16, 2016 No. 1.</p> <ol style="list-style-type: none"> 1. Professional standard "Forensic commodity research of non-food products", Minister of Justice of the Republic of Kazakhstan dated December 23, 2024 No. 60. 2. Professional standard "Forensic examination of fibrous materials and products made of them", Minister of Justice of the Republic of Kazakhstan dated January 23, 2024 No. 60. 3. The professional standard "Specialist in the design of textiles and clothing" was approved by the order of the Ministry of Labor and

	Social Protection of the Russian Federation (prepared by the Ministry of Labor of Russia No. 151n dated March 21, 2022)
Name of the degree awarded	After the successful completion of this EP, the graduate is awarded «Bachelor of Engineering and Technology» 6B07261 – «Innovative textiles, design and decor»
List of qualifications and positions	According to EP6B07261 – «Innovative textiles, design and decor», they can hold primary positions of technologist, engineer, specialist in research institutions, design and design organizations, without presenting requirements for work experience in accordance with the qualification requirements. The qualification directory of positions of managers, specialists and other employees approved by the order of the Minister of Labor and Social Protection of the Population of the Republic of Kazakhstan dated December 30, 2020 No. 553.
Field of professional activity	The field of professional activity is the textile industry (in the field of design and production of textile products; in the field of research; in the field of standardization, certification and quality management, technical expertise).
Objects of professional activity	- branches of the textile complex and processing industries, research organizations, firms of various forms of ownership, factories or textile enterprises, as well as control and production laboratories, regulatory and technical documentation.
Subjects of professional activity	- textile materials and products, knitted fabrics, natural and artificial leather, fur, non-woven and shoe materials; - technological equipment for textile production; - design and technical documentation of textile production; - normative and technical documentation and systems of standardization, certification of textile production;
Types of professional activity	- production and management of existing technological processes of production of yarn and yarns, fabrics, knitwear, nonwovens; operation and repair of technological equipment and automation of technological processes of production; - project-implementation of complex design projects, products and systems, subject and information complexes based on the methodology of introduction of design and artistic activities; knowledge of technologies for manufacturing design objects and layout design; knowledge of methods of ergonomics and anthropometry. -information technology knowledge of the basics of industrial production; knowledge of modern information technologies for creating graphic images, project documentation, computer modeling; -theoretical and experimental research in the field of production technology of fabrics and knitwear using modern methods of experiment planning.

<p>Learning outcomes</p>	<p>LO1. Communicate freely in the professional environment and society in Kazakh, Russian and English, taking into account the principles of academic writing and the culture of academic honesty.</p> <p>LO2. Demonstrate socio-cultural, professional development based on the formation of ideological, civic, spiritual and social – economic responsibility, methods of scientific and experimental research.</p> <p>LO3. Possess information, computer and digital literacy, generalization, analysis and perception of information, setting goals and choosing ways to achieve it</p> <p>LO4. Develop textile fabric compositions, define criteria and indicators of artistic and design proposals when working with materials and products</p> <p>LO5. To offer design solutions for the design of textile materials and products, and to give their economic justification taking into account materials, construction, technology, engineering systems.</p> <p>LO6. To analyze and evaluate the physico-mechanical and hygienic consumer properties of textile materials and products, as well as the causes of defects and defects, we conduct a forensic commodity examination using modern testing devices and equipment.</p> <p>LO7. Demonstrate spatial imagination, artistic taste, mastery of methods of modeling and coloring of textile materials.</p> <p>LO8. Apply modern innovative technologies and methods of processing competitive textile materials and products.</p> <p>LO9. To carry out engineering monitoring and adjustment of technological lines for the production of high-quality materials and products</p> <p>LO10. Study scientific and technical information, domestic and foreign experience, participate in research on improving technological processes and equipment, apply the results obtained in practice.</p> <p>LO11. To use research, entrepreneurial skills in professional activities.</p> <p>LO12. Demonstrate the ability to self-education and self-education, healthy lifestyle throughout life, work individually and in a team.</p>
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3. COMPETENCES OF EP GRADUATE

GENERAL COMPETENCIES (SOFTSKILLS). Behavioral skills and personal qualities	
GC 1. Competence in managing your literacy	GC1.1. The ability to self-study, self-develop and constantly update their knowledge within the chosen trajectory and in an interdisciplinary environment. GC1.2. The ability to express thoughts, feelings, facts and opinions in the professional sphere. GC1.3. The ability to mobility in the modern world and critical thinking.
GC2. Language competence	GC2.1. Ability to build communication programs in the state, Russian and foreign languages. GC2.2. The ability to interpersonal social and professional communication in the conditions of intercultural communication.
GC3.Mathematical competence and competence in the field of science	GC3.1 The ability and willingness to apply the educational potential, experience and personal qualities acquired during the study of mathematical, natural science, technical disciplines at the university to solve professional problems.
GC4.Digital competence, technological literacy	GC4.1.The ability to demonstrate and develop information literacy through the mastery and use of modern information and communication technologies in all areas of their lives and professional activities. GC4.2.The ability to use various types of information and communication technologies: Internet resources, cloud and mobile services for the search,

	storage, protection and dissemination of information.
GC5. Personal, social and educational competencies	<p>GC5.1. The ability to physical self-improvement and orientation to a healthy life to ensure full-fledged social and professional activities through methods and means of physical culture.</p> <p>GC5.2. The ability to socio-cultural development based on the manifestation of citizenship and morality.</p> <p>GC5.3. The ability to build a personal educational trajectory throughout life for self-development, career growth and professional success.</p> <p>GC5.4. The ability to successfully interact in a variety of socio-cultural contexts during study, at work, at home and at leisure.</p>
GC6. Entrepreneurial competence	<p>GC6.1. The ability to be creative and enterprising in different environments.</p> <p>GC6.2. Ability to work in the mode of uncertainty and rapid change of task conditions, make decisions, allocate resources and manage your time.</p> <p>GC6.3. Ability to work with consumer requests.</p>
GC7. Cultural awareness and self-expression	<p>GC7.1. The ability to show ideological, civic and moral positions.</p> <p>GC7.2. The ability to be tolerant of the traditions and culture of other peoples of the world, to possess high spiritual qualities.</p>
PROFESSIONAL COMPETENCIES (HARDSKILLS).	
Theoretical knowledge and practical skills specific to this field	<p>PC1. general professional.</p> <p>-the ability to mutually coordinate various means and factors of design, integrate various forms of knowledge and skills in the development of design solutions, coordinate interdisciplinary goals, think creatively, initiate innovative solutions and perform leadership functions in the project process. Perform reference samples of the design and decor object.</p>
	PC2. Artistic and creative competencies

- the ability to create a unique creative using your talent, artistic taste and the necessary techniques independently and in co-creation. To carry out the process of design taking into account modern trends in the field of textile design and decor.

PC3. production-technological activities in textile production.

-have an idea of the technology and the production of fibers from natural raw materials, be able to skillfully make technological transitions to obtain natural textile fibers, know the types of materials and equipment used, the types of defects that occur when each process and operation is incorrectly performed; to know the ways of rational use of wool and cotton; have an idea of the new technology and technology in the primary processing of natural fibers.

PC4. efficient usage of raw materials and equipment

-apply mathematical models to optimize the composition of the mixture of fibers in the design of the properties of yarn. Know the stages of designing parameters and spinning technology, methods for designing parameters of individual processes and their combination in production, ensuring the production of yarn of a given quality with good technical and economic indicators.

PC5. management processes and organization in textile production

- to know the structure and operation of modern spinning equipment, technological processes for the production of yarn from natural and chemical fibers, types of yarn defects, their causes and methods of elimination; know the range and purpose of the mélange yarn from natural and chemical fibers, know new ways of managing; have the skills to choose the raw

	materials and compile sorts for the production of mélanges yarn.
	PC6. information technology -analyze the causes of occurrence and eliminate defects in the produced yarn; develop technological and technical specifications for the range of produced yarn; understand the types of automatic control systems, the usage of robots and microprocessor technology.
	PC7. research activities -analysis of the state and dynamics of quality indicators of objects of activity (raw materials, yarn, fabric, knitwear, nonwovens, technological processes) using the necessary methods and means of research;

3.1 Matrix of correlation of EP learning outcomes in general with modules formed by competencies

	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7	LO 8	LO 9	LO 10	LO 11	LO 12
CC 1	+											
CC 2		+										
CC 3					+			+	+			
CC 4			+									+
CC 5							+				+	
CC 6							+			+		
PC 1		+				+			+			
PC 2				+	+		+					
PC 3				+		+	+					
PC 4			+		+			+				
PC 5			+				+				+	
PC 6				+		+				+		+

				atom, types of intra and intermolecular bonds, patterns of chemical reactions, energy and kinetics of chemical processes, solutions and dispersed systems, electrochemical processes. Handle chemical reagents, instruments and equipment, carry out mathematical calculations, plan and conduct the necessary experiment.															
		BD	ES	Theoretical and Applied Mechanics	<p>The purpose: Formation of theoretical knowledge of the basics of classical mechanics, resistance of materials and structural elements, theory of mechanisms and machines, calculation and design of machine parts of the industry equipment and research skills.</p> <p>Contents: General laws of mechanical motion and interaction of material bodies. Methods of calculating elements of machines and equipment for strength, rigidity and stability to ensure their reliable and safe operation. The main tasks and methods of structural, kinematic and force analysis of mechanisms. Performance criteria and calculation of machine parts. Connections of machine parts and transmission.</p>	4					v		v						
		BD	ES	Textile Machine Parts	<p>The purpose: Formation of a theoretical basis for understanding the methods of design and calculation of standard machine parts, skills of calculation practice and testing of parts and assembly units necessary for the development, operation and repair of textile machinery and equipment.</p> <p>Contents: The main criteria for the performance and calculation of machine parts. Details of textile production. Reliability. Selection of materials. Adaptability. Connections of machine parts. Types of compounds and their main characteristics. General information about transfers. Contact voltages. Lubricants. Shafts</p>						v		v						

				and axles. Sliding and rolling bearings. Couplings.														
	BD	ES	Engineering Computer Graphics	<p>The purpose: Formation knowledge, skills and abilities sufficient to compile engineering and design documentation using AutoCAD.</p> <p>Contents: Projection. Point and straight line. Plane. Axonometric projections. Geometric surfaces and bodies. Basic information on graphic design of drawings. Views, cuts and sections in drawings. Methods of connecting parts. Threaded products. Making sketches of parts. Compilation and design, reading and detailing of assembly drawings and general drawings. Initial setup. Completion and saving images. Building a drawing of a flat figure. Building drawings of parts. Image Editing. Building a three-dimensional model of an object.</p>	4			v										
	BD	ES	Bases of Mathematical Modeling of Technological Processes	<p>The purpose: Formation of students' competencies in the process of forming the ability to navigate the flow of information in the conditions of continuous development of science and technology, to learn how to use computer modeling to explain technological processes.</p> <p>Contents: Mathematical modeling of technological processes of textile production. This module includes static and dynamic models of textile production and consists of scientific, technical, methodological foundations of modeling and optimization of technological processes in the textile industry, contains methods for solving single-criteria and multi-criteria problems of optimization of technological processes of textile production.</p>	4		v	v										
	BD	ES	Normative and Technical Documentation	<p>The purpose: Formation of students' basic knowledge in the field of quality assessment and technical quality parameters in the production of</p>	4									v			v	

				<p>have an idea about your future profession, about the types of textile enterprises and a wide range of textile materials and products. Apply in practice technical means for measuring quality indicators to obtain reliable information about the properties of textile materials and products.</p> <p>Contents: Science and technology: history, modernity, future. The history of the development of the textile industry of the Republic of Kazakhstan and the production of textiles. Classification and structure of fibers. Critically analyze the current state of the textile industry.</p>														
	BD	ES	Bases of Academic Writing	<p>The purpose: Formation and strengthening of writing and critical thinking skills necessary for effective academic writing.</p> <p>Contents: Skills of creative writing of written works (essay, report, term paper, and diploma) using existing knowledge in the field of textile materials research, taking into account generally accepted requirements for the structure of text construction, the choice of presentation style, design using scientific literature. The ability to logically correctly, argumentatively and clearly build oral and written speech, including in a foreign language.</p>								v						v
	BD	ES	Textile Materials Study	<p>The purpose: Formation of theoretical knowledge of the fundamentals of textile materials science characteristics of the structure and properties of fibers, threads, fabrics, knitwear, nonwoven fabrics; Analyze and summarize the results obtained, comparing them with the standards;</p> <p>Contents: Consideration of the most important types of natural and chemical fibers, yarns, yarns; features of the structure and properties of</p>	4				v	v								

				fibers, yarns, fabrics, knitwear, nonwoven fabrics; characteristics of the properties of textile materials, their relationship with the structure and methods of their determination.														
	ChD	ES	Basics of Textile Production	<p>The purpose: Formation of knowledge about the obtained natural and chemical fibers, their properties in the fields of application. Familiarization with the processes of primary processing of natural fibers, the main indicators for assessing the quality of textile materials.</p> <p>Contents: Consider the basics of the processes of spinning natural and chemical fibers, weaving, knitting and nonwovens. The ability to draw up technological schemes of textile production processes; technological transitions of textile production. Independently determine the technological parameters of the main processes of spinning, weaving, knitwear and nonwovens.</p>				v		v								
	ChD	ES	Textile design	<p>The purpose: To study textile design, the range of textile materials, parameters, technological processes, interior space.</p> <p>Contents: To know the range of textile design objects, consumer requirements imposed on them; To know the technological processes, modes and parameters of the production of home textiles; To use textile materials taking into account the formative properties in the design of interior space.</p>	4			v		v								
	ChD	ES	Basics of design	<p>The purpose: Prepare for creative activity on the formation of an aesthetic expressive subject – spatial environment.</p> <p>Contents: Consider the basics of design, means of visual graphics and their application in design, techniques of technical presentation of visual graphics, means of composition and their application to create a harmonious composition –</p>				v		v								

					contrast, nuance, identity, statics, dynamics, rhythm, mass, scale, etc., the laws of composition. The study and analysis of the form of a simple and complex object, the laws of beauty: proportionality, three-component, subordination, grouping rules, various types of rhythmic and plastic movements, principles of transformation of various natural forms.													
		BD	HSC	Educational Practice	<p>The purpose: Consolidation and deepening of the theoretical knowledge of the teacher, their acquisition of practical skills and competencies, as well as experience of independent professional activity.</p> <p>Contents: Familiarization with the main activities of the student in various structures of the textile enterprise. Training in the methodology of searching and collecting information on a topic of interest with the help of information and bibliographic manuals. Have an idea about your future profession, about the types of textile enterprises. Know the safety precautions for those working at textile enterprises in the industry.</p>	1				v			v			v		
	Module of Technology and Equipments of Textile Production	BD	EC	Design of Fiber Materials	<p>The purpose: To study the composition, structure and properties of cotton, wool, linen, silk, chemical fibers</p> <p>Contents: The properties of fibrous materials of various raw materials are considered: cotton, wool, linen, silk, as well as chemical fibers. Parameters of the structure of fibers and yarn. Designing the composition of fiber mixtures and cotton spinning technology for all technological processes. To evaluate the properties of the designed structures using various physico-chemical testing methods. Analyze the relationship between the structure and properties</p>	5		v						v				

				Drawing up methods for designing technological parameters of knitwear combined incomplete weaves. To analyze resource-saving technologies for producing knitwear for a wide class of combined weaves.														
	BD	EC	Fabric Printing Technology	<p>The purpose: Studies the main types and methods of printing on fabric, drawing images on fabric, thermal transfer and screen-printing.</p> <p>Contents: The main types and methods of printing on fabric are considered. Description of the types and methods of using sublimation printers or special sublimation inks. Using a color laser printer. Applying the image to the fabric — thermal transfer and screen-printing. Advantages and disadvantages of using this method of printing on fabric.</p>	6				v	v		v						
	BD	EC	Innovative Method of Printing Textile Materials	<p>The purpose: Studies innovative ways of printing textile materials, methods of fabric dyeing, printing and dyeing.</p> <p>Contents: The features of the decoration of textile products using dyes with various methods are considered; To study tools, materials, accessories for the artistic decoration of fabrics using dyes. Acquire professional competencies in the field of textile decoration by means of dyeing, printing and painting fabrics; Analyze ways to create printed drawings on textile materials with different polymer fiber content</p>					v	v		v						
	BD	EC	Smart Textiles	<p>The purpose: Formation of students' aesthetic taste and creative thinking based on traditional and modern types of work with textiles; development of their artistic and creative abilities.</p> <p>Contents: To know the history of the development of "smart textile" technology. Classification of smart fabric textiles. Active</p>	6				v		v	v						

				smart textiles. Passive smart textiles. The main types of textiles from smart fabrics and their application. Intelligent textiles. Definition and classification of textiles smart fabrics with electronic information. Application of electronic information Smart Textile. To master various types of decorative and applied creativity in preparing a student for decorative and applied art.														
		BD	EC	Nanotechnology in Textile Industry	<p>The purpose: Formation of the main characteristic features of objects on a nanometer scale and related basic concepts, terms and definitions of an interdisciplinary nature.</p> <p>Contents: To analyze the ways of creating nanostructured objects; -the possibility of using tools for measuring and analyzing nanostructures and manipulating atoms; - production and application of nano structural materials, including nano textiles; skills: - in the study of the structure and behavior of natural and artificial nano structured materials; Principles of materials processing in nanotechnology.</p>					v	v	v						
	Module of General Technology and Service of Textile Production	BD	EC	Innovative Technologies of Textile Production	<p>The purpose: Formation of students to purposefully conduct research on the creation and artistic shaping of innovative textiles. To know the properties of innovative materials, to systematize and classify the types of modern textiles and other fabrics in accordance with the areas of their use.</p> <p>Contents: To know the development of trends in innovative technologies of textile production. 3D printing - getting a finished model from a special printer. Three-dimensional design technology. Creation of environmentally friendly technologies for dyeing and processing textile materials using modern</p>	6				v	v	v						

		BD	EC	Technology and Equipment in Textile Production	<p>The purpose: Formation of students' skills to determine the parameters of technological equipment and processes of spinning, weaving and knitting production. Be competent in new types of spinning, weaving and knitting production equipment.</p> <p>Contents: The main processes and equipment of spinning, weaving, knitting production are considered; The main factors affecting the unevenness of fibers and spinning products, the economy of raw materials, the productivity of machines are determined.</p>					v		v		v				
		BD	EC	Service and Operation of Textile Equipment's	<p>The purpose: To study the repair and adjustment of textile machines, replacement of worn parts, safety during maintenance and operation of textile production equipment, analysis of ways to repair damaged mechanisms of textile machines.</p> <p>Contents: Use methods of disassembly, assembly and installation of equipment, methods of adjusting the actuators of machines. Know the current state of textile equipment enterprises. The specifics of technological processes of textile industry enterprises. Organization of operation, repair and installation of equipment. Safety precautions during maintenance and operation of textile equipment.</p>	5					v			v	v			
		BD	EC	Repair and Adjustment of Textile Machines	<p>The purpose: Master the repair and adjustment of textile machines, replacement of worn parts, safety during maintenance and operation of textile production equipment.</p> <p>Contents: To know the rules of operation and maintenance of the textile equipment being operated and safety regulations. The main regulators. Wear of equipment parts, methods of detecting defects of parts. Technical</p>						v			v	v			

				characteristics of the equipment used in the fabric production process. The main parts of the automatic loom: lamellas, remiz, berdo Mechanisms of tension and feeding of the warp from the navoi.															
		ChD	HSC	Industrial Practice I	<p>The purpose: Formation of students with the nature and characteristics of their future activities based on the development of professional skills and gaining professional experience both within a single organization and across sectors of the economy.</p> <p>Contents: To have an idea of technological processes, textile production equipment, the location of workshops and their interrelation, product quality control, methods of testing textile materials and products, vehicles, economics, organization and management of production, standardization and quality control of products and technical and economic indicators of production.</p>	4						v						v	v
	Module of Assortment, Design and Finishing of Textile Materials and Products	ChD	EC	Assortment and Quality Assessment of Textile Materials and Products	<p>The purpose: Master the assortment, design and processing of textile materials and products. Take into account the principles of color combinations, correctly establish a correspondence between the color and texture of the fabric, material and color.</p> <p>Contents: Consider a wide range of textiles, nonwovens and knitwear. Analyze the order of quality assessment, the sequence of operations to determine the quality indicators of fabrics and canvases. Know the sequence of preparation and finishing of textile materials and products.</p>	4				v	v	v							
		ChD	EC	Assortment Mobility of Textile Production	<p>The purpose: Formation of students in the field of studying the assortment and technology of production of textile materials and products, as well as practical skills in identifying textile</p>					v	v	v							

				materials and their confection for specific products. Contents: Consider promising directions for expanding the range of multicomponent textile yarns. To know the range of products for which the designed yarn is intended and to generalize knowledge on resource-saving technologies in the textile industry. Development of a methodology for predicting the breaking load of yarn obtained by the ring spinning method.															
	BD	EC	Textile Interior Decoration	The purpose: Formation of students' knowledge of decorative and applied art, interior design, interior textiles, formation of professional competencies in interior design, manufacturing technology of various textile accessories and their use in the style solution. Contents: To know the basics of the artistic and industrial application of textiles; styles and directions of interior design; To be able to perform the selection of materials according to design requirements; to carry out the process of execution of products according to design	5						v								v
	BD	EC	Silkscreen Printing on Fabric	The purpose: Studies the technology of silk finishing and printing on the fabric surface Contents: Ensuring the quality of printing on fabric, possess the skills to determine the composition, structure and properties of natural fibers based on cellulose (cotton, flax, jute, hemp) by methods of qualitative and quantitative analysis; composition, structure and properties of natural protein fibers (wool, silk) by methods of qualitative quantitative analysis, preparation of silk fabrics. Preparation of materials from synthetic fibers (threads) and from a mixture of fibers.							v								v
	ChD	EC	Artistic Painting	The purpose: Formation of students'	4					v	v								

				of Woven Fabric	<p>professional skills in artistic painting on fabric.</p> <p>Contents: To know the history of the development of artistic painting of fabrics. Rules for the use of tools, devices, dyes when painting fabrics in various techniques and basic techniques for painting on fabric. To produce artistic painting of textile, products using various techniques and techniques of artistic painting on fabric; to use additional effects and techniques in fabric painting. Own: the technology of artistic painting on fabric</p>													
		ChD	EC	Artistic Knitting of Knitted Products	<p>The purpose: Formation of competence in the field of artistic design of knitwear in accordance with the direction of the chosen style.</p> <p>Contents: Apply knitting as an independent art form, its history, knitting methods, various ornaments. By creating patterns, students acquire knowledge about the meaning of color in the product, are acquainted with the characteristics and properties of colors, practice drawing up various color schemes, the basics of composition and color science. All this is aimed at creating a harmonious, artistic expressive work.</p>				v	v								
	Design of Textile Materials and Production module	ChD	EC	Graphics in Textile Design	<p>The purpose: Formation of competence in the use of methods and techniques of design graphics in the artistic design of textiles.</p> <p>Contents: To develop the ability to make non-standard decisions, to look for new combinations of materials, colors, textures. To know the modern variety of graphic tools and techniques and the principles of their creative use in artistic design. Be able to use computer graphics tools in the process of design design.</p>	4				v	v		v					
		ChD	EC	Sketch and Design Graphics in the Design of	<p>The purpose: Formation of artistic and design thinking, which develops in the process of systematic art education of design and design</p>					v	v	v						

			Artistic Textiles	orientation; compositional solutions of design objects, mastering various methods of design graphics. Contents: Study and analysis of the form of a simple and complex object, mastering and applying graphic, technical and pictorial techniques for depicting forms of various types of materials in a variety of techniques, developing professional skills of theoretical and practical knowledge in the field of project culture, as well as performing culture with a focus on solving design and creative tasks of modern design.															
		ChD	EC	Decoration of Textile Materials	The purpose: Formation of students' understanding of the factors that determine the harmonization of elements in interior decoration, a holistic and systematic view of various artistic techniques that can emphasize the chosen design style. Contents: Study of traditional and new methods of creating decor; mastering the skills of designing decorative elements taking into account the requirements of the consumer; mastering the skills of making decorative elements.	5			v							v			v
		ChD	EC	Art- Design in Textiles	The purpose: Formation of the student's aesthetic taste and creative thinking based on traditional and modern types of work with textiles. Content: To develop the ability to make non-standard decisions, to look for new combinations of materials, colors, textures.				v							v			v
	Module of Modern Technologies and Ecological	ChD	EC	Finishing and Dyeing Textile Materials and Products	The purpose: Formation of a student's competence in the development of a new range of textile fabrics and products of various assortment. Contents: To acquaint with the ways of giving textile materials and products coloristic and	5										v	v		

5. Summary table reflecting the volume assimilated credits of education program modules

Course of Study	Semester	The number of mastered modules	The number of studied disciplines			Number of KZ credits					Total hours Compulsory component	Total KZ credits University component	The number of	
			Compulsory component	University component	Optional component	Theoretical training	Physical education	Educational practice	Industrial, pre-graduate practice	Final certification			Optional component	Theoretical training
1	1	3	3	2	1	28	2				900	30	6	1
	2	3	3	2	1	27	2	1			900	30	5	2
2	3	5	3	2	1	28	2				900	30	6	2
	4	5	-	1	4	24	2		4		900	30	5	2
3	5	5		-	6	30					900	30	6	-
	6	3			5	24			6		900	30	3	1
4	7	4			4	21					600	21	4	-
	8	2		-	4	21					600	21	4	-
	9					18			10	8	600	18		1
Total		31	9	7	26	203	8	1	20	8	7200	240	40	9

6. LEARNING STRATEGIES AND METHODS, MONITORING AND EVALUATION

Learning strategies	<p>Student-centered learning: The student is the center of teaching/learning and an active participant in the learning and decision-making process.</p> <p>Practice-oriented learning: focusing on the development of practical skills.</p>
Teaching methods	<p>Conducting lectures, seminars, various types of practices:</p> <ul style="list-style-type: none"> • using innovative technologies; • problem-based learning; • case study; • work in a group and creative groups; • discussions and dialogues, intellectual games, Olympiads, quizzes; • reflection methods, projects, benchmarking; • Bloom's taxonomies; • presentations; • rational and creative use of information sources: • multimedia training programs; • electronic textbooks; • digital resources. <p>Organization of independent work of students, individual consultations.</p>
Monitoring and evaluation of the achievability of learning outcomes	<p>Current control on each topic of the discipline, control of knowledge in classroom and extracurricular classes (according to syllabus). Assessment forms:</p> <ul style="list-style-type: none"> • survey in the classroom; • testing on the topics of the discipline; • control jobs; • protection of independent creative works; • discussions; • trainings; • colloquiums; • essays, etc. <p>Boundary control at least twice during one academic period within the framework of one academic discipline.</p> <p>Intermediate certification is carried out in accordance with the working curriculum, academic calendar.</p> <p>Forms of holding:</p> <ul style="list-style-type: none"> • exam in the form of testing; • oral exam; • written exam; • combined exam; • project protection;

	<ul style="list-style-type: none">• protection of practice reports. Final state certification.
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7. EDUCATIONAL AND RESOURCE SUPPORT OF THE EP

<p>Information Center</p> <p>Resource</p>	<p>Information and educational portal "PROFESSOR" www.portal.ukgu.kz, provides information about the educational process at SKU. Thanks to an effective search system, it is possible to obtain information related to the student personally, such as lists of classes, exam schedules for semesters, academic performance, UMKD of the current semester, and in general for the university (data on faculties, teachers, etc.).</p> <p>Library web site http://lib.ukgu.kz is an indicator of the level of information service. The reference and bibliographic apparatus of the library, bulletins of new arrivals, novelties of publishing houses, virtual exhibitions, news feed and other services are widely presented on the site. Thematic collections of Internet resources are formed at the request of students and teachers. For teachers, students there is a section "Information for scientists", which presents the requirements for educational, scientific and reference publications in accordance with GOST standards; rules for the design of literature lists; a list of periodicals and scientific and technical publications of the Republic of Kazakhstan, recommendations for determining the citation index.</p> <p>A modern reference and bibliographic apparatus is provided to the services of users: an electronic catalog, an electronic file of articles, an electronic file of dissertations abstracts. Work with catalogs is carried out in two types: electronic and traditional (card). The total volume of the electronic catalog is 151513 bibliographic entries. The electronic catalog of the OIC is presented on the website http://lib.ukgu.kz.</p> <p>For university users, the Educational and Information Center (Library) has created up-to-date full-text databases of its own generation: "Works of the teaching staff of M.Auezov SKSU", "Electronic Archive", "AlmaMater", etc., which since 2017 for the convenience of searching combined into a single search engine. On-line access to databases is open: "SpringerLink", "Scopus", "Envoy", "Thomson Reuters ISI Web of Science", "ScienceDirect", "EBSCO", to Kazakhstan databases: "KazPatent", "Epigraph", "Zan", "RMEB".</p>
<p>Material and technical base</p>	<p>The educational program 6B07260 "Technology and design of textile materials" is equipped in accordance with the requirements of the necessary classroom fund, educational laboratories, computer classes, instruments and equipment for laboratory scientific experiments.</p> <p>Laboratories are equipped with a large number of equipment</p>

	<p>and devices: automatic hosiery knitting machines "Haisen china HS 808 M", "Haisen china HS 808 P", automatic glove knitting machine "Haisen china HS 305", comb-carding machine firm 1603 "Textima", tape machine "LMSH-220-1T", wrapping machine "Merrylock", sewing machine "Bernette", knitting machine "Silver" SK-280, bursting machine RM 3-1, electronic laboratory scales Adventurer, microscope HSZ-137V, drying cabinet SHS-80, centrifugal VUS MT 250, moisture meter VUS MT 250, drying cabinet SHS-80, aspiration psychomotor MV-4M, torso scales WT, analytical scales, thermostats, refrigerator, water baths. Laboratories are equipped with personal protective equipment, first aid kits, fire extinguishing equipment (fire extinguisher), equipped with fume hoods.</p>
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AGREEMENT SHEET

by Education Program code 6B07261 – «Innovative textiles, design and decor»

Director of DAA



Sign

Naukenova A. S.

Director of DASc



Sign

Nazarbek U.B.

Director of DE&C



Sign

Bazhirov T. S.

Review from the employer

on the educational program 6B07261 – «Innovative Textiles, Design and Decor» developed in SKU named after M. Auezov, Shymkent city.

Brief characteristic of the enterprise and profile of its activity. Production capacity of LLP "SIC Zhana Zhoba", is more than 5 thousand tons of finished products. Carded and combed yarn is a product of processing of medium- and long-fiber varieties of cotton fiber. Depending on the spinning system the yarn is subdivided into combed and carded yarns. The company has installed equipment of world brands "Rieter", "MURATA", "VOLKMANN", "STRAPEX, XORELLA" and laboratory equipment "Uster". The installed technological equipment meets the requirements of ISO 9001 series.

Determines the grade, moisture, litter and other qualitative indicators of cotton in the laboratories of the plant area and billet departments outside the plant. In accordance with the requirements of current state standards, reference samples for proper acceptance in laboratories cluster from cotton takes average samples and visually checks their quality.

The reviewed educational program (hereinafter EP) in the direction of training 6B07261 – «Innovative Textiles, Design and Decor», is a system of documents developed on the basis of the State obligatory standard of education (hereinafter State obligatory standard of education) VPVO Order № 21 of the Minister of Science and Higher Education of the Republic of Kazakhstan from January 19, 2023. The developed EP has a high level of provision with educational and methodical documentation and materials. The quality of the reviewed EP does not cause doubts. The program can be used for training bachelors.

EP regulates the objectives, expected results, content, conditions and technologies of the educational process, evaluation of the quality of graduate training in this area of training and includes: curriculum, working educational programs of courses, subjects, modules and other materials that ensure the quality of training of students, as well as programs of academic and industrial practice, calendar study schedule and methodological materials that ensure the implementation of appropriate educational technology.


Material and technical support of the educational process in the direction of training 6B07261 – «Innovative Textiles, Design and Decor» fully meets the requirements of the State Educational Standards.

It should be noted that the quality of the content component of the curriculum of this educational program is not questionable. The disciplines included in the educational program reveal the essence of the actual for today. The reviewed program itself structurally and content-wise allows to achieve the main objective of the educational policy of M. Auezov SKU, on the implementation of educational programs of higher and (or) postgraduate education, namely to provide training of highly qualified specialists with advanced professional training, competitive in the domestic and international labor market.

Conclusion on EP 6B07261 – «Innovative Textiles, Design and Decor». The structure of the program is made logically, consistently and provides their achievement. The educational program meets the requirements for the training of highly qualified specialists.

Based on the above, we state the compliance of the EP in the direction of training 6B07261 – «Innovative Textiles, Design and Decor», implemented in the SKU named after M. Auezov, the normative state documents in the field of higher education of the Republic of Kazakhstan.

Director of «SIC Zhana Zhoba» LLP



R.S. Tashmenov



Expert opinion

for the educational program 6B07261 - "Innovative textiles, design and decor", developed by the Department of "Technology and Design of textile materials" of M. Auezov SKU, Shymkent, Republic of Kazakhstan

The educational program 6B07261 - "Innovative textiles, design and decor" is developed in accordance with the Rules of the organization of the educational process on credit technology training and is designed to provide training of the textile industry of the Republic of Kazakhstan by highly qualified specialists corresponding to all 6 levels of the European qualified framework for bachelors of engineering and technology. The educational program is relevant for training the necessary personnel for the development of the textile industry of the Republic of Kazakhstan.

The educational program corresponds to the goals formulated in the module, which reflect the mission of the university, the needs of employers in the textile industry and students studying. It also fully corresponds to the qualification framework of the Republic of Kazakhstan.

The reviewed educational program (hereinafter referred to as EP) in the field of training 6B07261 - "Innovative textiles, design and decor", is a system of documents developed on the basis of the State Mandatory Standard of Education (hereinafter referred to as SMSE) Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated January 19, 2023 No. 21

Learning outcomes and competencies, their relationship to the demands of the labor market. SKU named after M. Auezov is aimed at training highly qualified specialists who are in demand in the labor market, integrating the university into the global educational environment, making a breakthrough in the quality and effectiveness of scientific research and innovative developments, and positioning the university in national and international university rankings.

The developed EP has a high level of availability of educational and methodological documentation and materials. The presented programs of all the declared disciplines and practices. The quality of the reviewed EP is beyond doubt. The program can be used for bachelor's degree programs.

The presence of components that develop practical skills. The practice of undergraduate students is a mandatory form of the educational process, strengthens theoretical knowledge and conducting classes at the enterprise allows students to acquire practical skills and serves as a training for their professional adaptation in the workplace in the future. The topics of course and final bachelor's works, educational and research works of students were also agreed with the representatives of the enterprises.

It should be noted that the SKU named after M. Auezov has departments "Business Incubator" and "Patent Department", which serve their students, undergraduates, doctoral students and teaching staff free of charge. This gives you a great chance to realize yourself as a person of science and as an entrepreneur, as the current realities have proven that you need to be versatile and creative.

The educational program reflects the learning outcomes and competencies of highly qualified specialists, which are based on the Dublin Descriptors, as well as in the professional requirements of the standards of the industry framework.

The educational program corresponds to the SMSE, CURRICULUM and standard curriculum. It contains components for preparing for professional activity, developing key competencies, intellectual and academic skills, reflecting the modern requirements of society, including the presidential program for mastering and teaching three languages: Kazakh, Russian and English.

The EP regulates the goals, expected results, content, conditions and technologies of the educational process, the assessment of the quality of graduate training in this field of training and includes: curriculum, working curricula of courses, subjects, modules and other materials that ensure the quality of training of students, as well as programs of educational and industrial practice, a calendar training schedule and methodological materials that ensure the implementation of the appropriate educational technology.


Material and technical support of the educational process in the training direction 6B07261 - "Innovative textiles, design and decor" fully meets the requirements of the State Educational Standard.

The subjects listed in the program are presented in a logical order and reflect the main requirements of the curricula and training programs.

The educational program is designed in accordance with the academic load of students and teachers in the credit system of education. It covers all aspects of the organization of industrial practice, which are expressed in the training load in credits (hours).

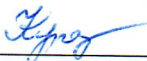
As a result of mastering the educational program, the graduate will receive the awarded Bachelor of Engineering and Technology degree in the educational program 6B07261 - "Innovative textiles, design and decor".

Having familiarized with this educational program 6B07261 - "Innovative textiles, design and decor", experts believe that it meets all the requirements for the training of highly qualified bachelors in OP 6B07261 - "Innovative textiles, design and decor".

Chairman of the Academic Commission  Khanzharov N.

Members of the Commission:

Cand.chem.sci., Professor of the Chair
«Food Engineering»



Urazbaeva K.A.

candi. tech.sci., Assoc. Prof. Head of the
Chair «Food Engineering»



Imanbayev A.