MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

KYIV NATIONAL UNIVERSITY OF TECHNOLOGIES AND DESIGN

SCIENTIFIC STUDY PROGRAM

DESIGN AND TECHNOLOGY OF SEWING PRODUCTS

Level of higher education first (bachelor's).

Degree of higher education bachelor.

Knowledge area 18 Manufacturing and technology

Specialty 182 Consumer industry technologies.

Qualification bachelor in Consumer industry technologies.

Kyiv 2021

1. Profile of the educational and professional program Design and Technology of Sewing Products.

1 – General information	
Full names of the higher education institution and structural unit	Kyiv National University of Technologies and Design, Department of Technology and Design of Sewing Products.
Degree of higher education and qualification	Level of higher education - first (bachelor's). Degree of higher education - bachelor. Knowledge area - 18 Manufacturing and technology. Specialty - 182 Consumer industry technologies.
Diploma and the scope	Bachelor's degree, single, 240 ECTS credits / 180 ECTS credits for a reduced period of study.
Accreditation	Accreditation Certificate of accreditation of the educational-professional program UD № 11007001 dated July 11, 2018.
Cycle / level	the sixth level according to National Qualifications Framework
Prerequisites	Complete general secondary education, professional higher education or junior bachelor's degree (junior specialist). In accordance with the Standard of Higher Education in the specialty based on the degree of junior bachelor (OQR of the junior specialist), the University recognizes and recalculates ECTS credits received within the previous educational program of junior bachelor (junior specialist).
Language	Ukrainian
The validity of the study program	1 July 2023.
Weblink to the study program description	https://knutd.edu.ua/ekts/

2 – The purpose of the educational program
Training of specialists who have in-depth knowledge, as well as basic and professional competencies in the field of garment production with wide access to employment and the possibility of further training. Successful graduates must demonstrate theoretical knowledge and mastery of practical skills and abilities to design competitive garments and highly efficient modern manufacturing processes. *The main objectives of the program are*: formation and development of general and professional competencies in the specialty of light industry technology, which involves the introduction of professional knowledge and practical skills to solve specialized problems and practical problems in the production and technology of garments; meeting the needs of the individual in intellectual and cultural development by obtaining higher education in the field of garment production; meeting the needs of society in qualified personnel by training specialists in the design and technology of garments.

3 – Characteristics of the educational program	
Subject area	The program is focused on the formation of applicants for competencies to acquire deep knowledge, skills and abilities in the specialty. Compulsory study modules - 75%, of which: general training - 30%, vocational training - 44%, practical training - 13%, foreign language learning - 13%. Disciplines of free choice of students - 25% are selected from the university catalog in accordance with the approved procedure at the University.
Program orientation	Educational and professional bachelor training program.
The main focus of the program	Emphasis is placed on the formation and development of professional competencies in the field of design and manufacturing technology of various products, examination of the quality of garments and their manufacturing processes, design and organization of work in the main shops of the garment company and software used to automate garment manufacturing processes.

Study program features	Forms specialists in design, manufacturing technology and quality assessment of garments with creative thinking, proactive and able to quickly adapt to the requirements of the modern production environment. Takes into account modern requirements for solving practical problems by using the acquired knowledge. Production practice is carried out at modern garment enterprises of Ukraine of various organizational forms. Leading practitioners of the industry (presentations, lectures, webinars, round tables, etc.) are involved in the implementation of the program.	
4 – Suitability of graduates for employment and further study		
Suitability for employment	The graduate is suitable for employment in enterprises, organizations and institutions operating in the field of production and quality examination of garments. Can work in all administrative positions of the lower level of industrial garment enterprises (master, technologist, head of the department, shop, department); in the positions of designer and technologist at the enterprises of service individual manufacturing of clothes and the fashion industry; as an expert on the quality of clothing and its manufacturing processes in government agencies with the functions of control, customs service and departmental organizations of various levels. Acquisition of additional qualifications in the system of postgraduate education.	
Further training	Opportunity to study according to the educational-scientific or educational-professional program of the second (master's) level of higher education.	
5 – Teaching and assessment		
Teaching and learning	Student-centered and problem-oriented learning, learning through training and industrial practice and self-study are used. The system of teaching methods is based on the principles of purposefulness, binary - active direct participation of teacher and student. Forms of organization of the educational process: lecture, seminar, practical, laboratory classes, practical training, independent work, consultation, development of professional projects (works).	
Grading	Exams, tests, tests, piece projects and works, presentations, reports on laboratory works, reports on practice, control works.	
6 – Program competencies		
Integral competence (IC)	Ability to solve complex specialized problems and practical problems in the production and technology of light industry or in the learning process, which involves the application of certain theories and methods of relevant sciences and is characterized by complexity and uncertainty of conditions.	
General competencies (GC)	**GC 1**	The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
	GC 2	Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies. active recreation and a healthy lifestyle.
	GC 3	Ability to abstract thinking, and analyze
	GC 4	Ability to apply knowledge in practical situations.
	GC 5	Ability to adapt and act in a new situation.
	GC 6	Skills in the use of information and communication technologies.
	GC 7	Ability to make informed decisions.

	GC 8	Ability to learn and master modern knowledge.
	GC 9	Safety skills.
	GC 10	Ability to act on the basis of ethical considerations (motives).
Professional competencies (PC)	**PC** 1	Ability to use knowledge and understanding of basic sciences to solve professional problems.
	PC 2	Ability to use mathematical methods in the design of garments and technologies for their manufacture, as well as in production control.
	PC 3	Ability to apply modern experimental methods to determine the characteristics of materials and garments and find appropriate solutions to improve their quality.
	PC 4	Ability to systematically describe the processes of manufacturing garments and find optimal solutions to production and technological problems.
	PC 5	Ability to organize and implement effective technological processes of manufacturing and / or sales of garments of different range and purpose.
	PC 6	Ability to ensure the efficiency and quality of design and technological work in light industry.
	PC 7	Ability to solve a wide range of specialized problems and tasks in professional activities, justifying the choice of methods and proposed solutions.
	PC 8	Ability to professionally use special terminology for the design and manufacture of garments and their manufacturing processes.
	PC 9	Ability to carry out feasibility studies of production decisions, in particular on the choice of materials, range of garments, their consumer properties and equipment of technological processes of their manufacturing.
	PC 10	Ability to receive, store, process and analyze information needed to solve problems of professional activity, quality forecasting at all stages of design, manufacture and / or sale of garments.
	PC 11	Ability to apply knowledge of the main aspects of the use of terminology for the design and manufacture of garments in Ukrainian and foreign languages.
	PC 12	Ability to use information and communication technologies to solve experimental and practical problems in the field of garment manufacturing.
	PC 13	Ability to create sketches of models and their technical drawings using modern graphic computer programs; to carry out the express analysis of the maintenance of raw components of fabrics and materials for production of clothes; build basic structures according to different methods and perform modeling of different types in manual and automated modes with the use of modern CAD; to qualitatively make all range of garments of various complexity; to work on modern sewing equipment and perform actions aimed at its adjustment and maintenance; to develop and draw up in compliance with the existing regulatory requirements design and technological documentation for the manufacture of garments in industrial production; to perform design documentation in compliance with existing regulatory requirements for the product and the technological processes of the main industrial production of garments.

7 – Program learning outcomes	
Knowledge and understanding:	
PLO 1	Know and understand the basic and applied sciences at the level necessary to achieve other results of the educational program.
PLO 2	Know and understand the technology of manufacturing light industry products, including the implementation of technological, technical and economic and design.
PLO 3	Know and understand the general anatomy of the human figure and methods of modern anthropometric and biomechanical research.
PLO 4	To know and understand features of construction of drawings of details of basic designs of clothes of various assortment.
Application of knowledge and understanding (skills):	
PLO 5	Apply abstract thinking in solving complex specialized problems in the production and technology of light industry.
PLO 6	Use modern information systems and technologies, general and specialized software in professional activities.
PLO 7	Have the skills of business communication, teamwork, be able to lead a discussion in the field of light industry technology.
PLO 8	To determine the characteristics and quality of light industry products in the laboratory using modern methods of production control.
PLO 9	Have professional terminology and basic concepts of materials science, design, technology, design, commodity science, technological processes of manufacturing light industry products, the range of quality indicators.
PLO 10	Describe, identify and classify light industry facilities. Know and understand modern principles of light industry organization.
PLO 11	Organize, control and manage the technological processes of manufacturing light industry products.
PLO 12	Collect, process, analyze information related to light industry products, production technologies, quality expertise, technical and economic indicators and demand.
PLO 13	Have the skills to independently perform typical professional tasks, group leadership and mentoring.
PLO 14	Perform engineering calculations necessary for the implementation of professional activities, following standard methods and applicable regulations.
ПРН 15	To form the structure of the range of light industry products in accordance with their purpose and the requirements of standards and consumers.
PLO 16	Be able to develop, improve or evaluate production products and light industry technologies.
PLO 17	Adhere to occupational safety and environmental requirements in professional activities.
PLO 18	Ensure economic efficiency of production and sale of light industry products through the introduction of resource-saving and competitive technologies.
PLO 19	Adhere to ethical norms in relation to other people and nature (the principle of bioethics), understanding the impact of advances in light industry technologies on the social sphere.
PLO 20	Use creative thinking in solving practical problems of design and manufacturing technologies of garments from different materials (knitwear, natural and artificial leather and fur, etc.).
PLO 21	Be able to create sketches of models of modern clothing and their technical drawings in accordance with the laws of composition and color.
PLO 22	Perform typical professional tasks in commodity science and examination of garments, following standard methods and current regulations.
PLO 23	Use modern graphic computer programs and computer-aided design (CAD) systems to solve the problems of designing garments of different styles, shapes, silhouettes and design solutions.

Formation of judgments:	
PLO 24	Communicate freely on professional issues orally and in writing in the state and foreign languages.
PLO 25	To form and defend one's own worldview and public position, to act socially responsibly and consciously.
PLO 26	Preserve and increase the achievements and values of society, lead a healthy lifestyle.
8 – Resource support for program implementation	
Staffing	All teaching staff who provide this scientific study program correspond to the taught courses profile by qualification and have got the necessary experience of pedagogical activity and practical work. Professionals with research and / or professional experience and foreign lecturers are involved in the training process.
Logistics	Logistics allows to fully ensure the educational process throughout the study program cycle. The condition of the classes and laboratories is certified with sanitary and technical passports that comply with existing regulations.
Information and methodical support	The program is fully provided with an educational and methodical complex of all courses, which availability is presented in the modular environment of the educational process of the University.
9 – Academic mobility	
National credit mobility	Provides for the possibility of academic mobility in some components of the educational program, providing the acquisition of general competencies.
International credit mobility	The program develops prospects for participation and internships in research projects and academic mobility programs abroad.
Studying for foreign students	Studying of foreign students is according to accredited programs.

2. List of components (study courses) of the scientific study program of the first (bachelor's) level of higher education

Cod	Components of the study program (study courses, courses projects (works), practices, qualification work)	Number of credits	Form of control
1	2	3	4
Required components of the educational program			
General training cycle			
RC 01	Ukrainian and foreign culture	3	залік
RC 02	Business Ukrainian language	3	залік
RC 03	Philosophy, political science and sociology	6	екзамен
RC 04	Foreign Language (english, german, france)	12	екзамен
RC 05	Higher mathematics	6	екзамен
RC 6	Physics	6	екзамен
RC 7	Chemistry	3	екзамен
RC 8	Information systems and technologies	6	екзамен
RC 9	Life safety and civil protection	3	екзамен
RC 10	Physical education[1]	3	залік
RC 11	Engineering and computer graphics	6	екзамен
RC 12	Foreign language of professional orientation (english, german)	12	екзамен
	Total from the cycle	69	
Cycle of professional training			
RC 13	Composite bases in clothes	3	екзамен
RC 14	Basics of making sewing products	6	екзамен
RC 15	Fundamentals of design of sewing products	3	залік
RC 16	Professional communications	3	залік
RC 17	Entrepreneurial business	3	залік
RC 18	Materials science	6	екзамен
RC 19	Anthropometry and basics of biomechanics	3	екзамен
RC 20	Equipment for the manufacture of products	3	екзамен
RC 21	Technology of sewing products	12	екзамен
RC 22	Design of garments	12	екзамен
RC 23	Qualitology of garment production	3	екзамен
RC 24	Design preparation of production	3	екзамен
RC 25	Features of design of various purpose products	3	екзамен
RC 26	Features of technology of production of products from various materials	3	екзамен
RC 27	Commodity science and quality evaluation of garments	6	екзамен
RC 28	Fundamentals of designing technological processes of mass production of clothing	6	екзамен
RC 29	Computer technologies in the garment industry	6	екзамен
RC 30	Automated production control systems (APCS) and automated technological processes of clothing production	3	залік
RC 31	Educational practice	18	залік
RC 32	production practice	6	залік
	Total from the cycle	111	
	Total credits for Compulsory components	**180**	
Elective components			
EC	Courses for student`s choice	60	залік
	Total credits for Elective components	**60**	
	TOTAL CREDITS	**240**	

[1] - non-credit discipline