

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

KYIV NATIONAL UNIVERSITY OF TECHNOLOGIES AND DESIGN

SCIENTIFIC STUDY PROGRAM

CONSUMER INDUSTRY TECHNOLOGIES

Level of higher education _____ second _____

Degree of higher education _____ Master _____

Knowledge area _____ 18 Manufacturing and technology _____

Specialty _____ 182 Consumer industry technologies _____

Qualification _____ Master in Consumer industry technologies _____

Kyiv 2021

1. Profile of the scientific study program Consumer industry technologies

1 – General information	
Full names of the higher education institution and structural unit	Kyiv National University of Technologies and Design, Department of Ergonomics and Design; Department of Technology and Design of Sewing Products, Department of Textile Technology and Design, Department of Design and Technologies of Leather Products.
Degree of higher education and qualification	Level of higher education - second. Degree of higher education - Master. Knowledge area - 18 Manufacturing and technology. Specialty - 182 Consumer industry technologies.
Diploma and the scope	Master`s Diploma, unitary, 120 credits ECTS.
Accreditation	Accreditation Certificate of study program УД № 11008923 від 12.06.2019 р.
Cycle/level	the seventh level according to National Qualifications Framework
Prerequisites	Bachelor degree
Language	Ukrainian
The validity of the study program	1 July 2024
Weblink to the study program description	http://en.knutd.edu.ua/ekts/
2 – The purpose of the study program	
<p>Training the specialists with deep knowledge, as well as basic and professional competencies in the field of manufacturing and technologies of the consumer industry is <i>the goal of the program</i>. It is aimed at gaining the student's ability to conduct research at the appropriate level from the stage of problem setting to results analysis and conclusions as well as the ability to carry out the scientific and pedagogical activity in HEI.</p> <p><i>The main objectives of the program</i> are the formation and development of general and professional competencies in the consumer industry field. It involves the following: the introduction of professional knowledge and practical skills of integrative solution of research problems in the field of the consumer industry manufacturing technologies into professional activity; effective professional communication in the scientific and pedagogical team; formation of own style of scientific and pedagogical activity.</p>	
3 – Characteristics of the study program	
Subject area	<p>The program is focused on the competencies formation for the acquisition of deep knowledge, skills, and abilities in the field of manufacturing and technology of the consumer industry.</p> <p>Compulsory studying modules - 73%, of which: general courses - 13.3%, vocational training - 33.4%, practical training - 23.3%, a foreign language studying - 6.7%, diploma - 23.3%.</p> <p>Elective disciplines (27%) are chosen by students from the general University catalog according to the approved University Procedure.</p>
Program orientation	the Masters scientific study program.
The main focus of the program	Emphasis is on the formation and development of professional competencies in the field of manufacturing and technology of the consumer industry; the study of theoretical and methodological provisions, organizational and practical tools for scientific and pedagogical activities..
Study program features	The education process is performed in an active research environment, focused on the competencies acquisition for solving complex problems in the field of manufacturing and technology of the consumer industry in the following areas: Fashion Industry; Design and Technology of Sewing Products; Technologies

	and Design of Fur Products; Knitwear Technology and Design; Footwear and Haberdashery Design; Styling, Design and Artistic Decoration of consumer industry products. It provides using the modern methods for theoretical and experimental research to identify, quality assess, and safety of materials for the consumer industry products; forecasting the range and assessing the quality level at all stages of design and manufacture of consumer industry products for various purposes.	
4 – Graduate’s suitability for employment and further study		
The employment suitability	The graduate is could be employed in enterprises, institutions, and organizations of the consumer industry as an expert engineer, research engineer, engineer for technical examination of textiles and the consumer industry products; as well as in higher and vocational education institutions as teaching staff or researcher.	
Further study	Lifelong learning to improve professional, scientific and other activities. Possibility to continue studying at the educational-scientific program of the third level of higher education (PhD).	
5 – Teaching and grading		
Teaching and learning	Student-centered and problem-oriented learning, learning through research, scientific-pedagogical and practical training, and self-study are used. The system of teaching methods is based on the principles of purposefulness and binary - active direct participation of research and teaching staff and students. Forms of the education: lecture, seminar, practice, laboratory classes, practical training, individual work, consultation, Master`s thesis.	
Grading	Exams, tests, courses projects, presentations, reports, qualification work.	
6 – Program competencies		
Integral competence (IC)	Ability to solve complex problems of the consumer industry technologies or of the training, which involves research and/or innovation and is characterized by the uncertainty of conditions and requirements.	
General competencies (GC)	GC 1	Ability the knowledge using at practice.
	GC 2	Ability to plan and manage time.
	GC 3	Ability to communicate in a foreign language.
	GC 4	Interpersonal skills.
	GC 5	Ability to the teamwork.
	GC 6	Ability to abstract thinking, analysis and synthesis
Professional competencies (PC)	PC 1	Ability to develop and manage projects in the field of the consumer industry technologies.
	PC 2	Ability to collect, analyze and process information from different sources, including foreign ones, to solve complex scientific and creative problems in the field of the consumer industry technology.
	PC 3	Ability to safe activities when manufacturing the consumer industry products.
	PC 4	Ability to demonstrate initiative and leadership, to bear personal responsibility in the professional sphere.
	PC 5	Ability to use information technology for processing and analysis of empirical data, modeling, design, manufacturing, and quality control of the consumer industry products.
	PC 6	Ability to make effective decisions and ensure the appropriate quality level of work, safety, and economic efficiency the manufacturing in the consumer industry.
	PC 7	Ability to conduct research at the appropriate level in the field of the consumer industry manufacturing and technologies from the problem statement stage to the analysis and conclusions of the results.

	PC 8	Ability to scientific and pedagogical work in higher education institutions and vocational education institutions, related to the teaching of courses in the field of the consumer industry technology.
	PC 9	Ability to study the characteristics and / or properties of materials and products of the textile and consumer industry using modern methods and tools.
	PC 10	Ability to develop intellectual property and solve issues of their protection.
	PC 11	Ability to use the modern methods of research and experimental results processing.
	PC 12	Ability to communicate professionally with potential foreign partners, a foreign language knowledge as a means of forming ideas and strategies in the professional field.

7 – Program learning outcomes

Knowledge and understanding:

PLO 1	to have got specialized conceptual knowledge, including modern scientific achievements in the field of the consumer industry manufacturing and technologies, sufficient to produce new ideas and conduct research.
PLO 2	to know the basic laws and regulations for occupational safety and health in the industry, international norms in occupational safety, social responsibility.
PLO 3	to know the basics of management and protection of intellectual property, the legal framework of Ukraine for the intellectual property rights.
PLO 4	to understand mathematics, physics, chemistry, general engineering at the level necessary to achieve other learning outcomes within the study program.

Skills:

PLO 5	to plan scientific and/or applied research in the field of textile and consumer industry technologies, to choose effective research methods, to process and analyze research results, to justify conclusions.
PLO 6	to communicate fluently in state and foreign languages orally and in writing on scientific, engineering, and manufacturing issues in the field of textile and consumer industries technologies, to present the activities results.
PLO 7	to develop and implement innovative projects in the field of textile and consumer industries manufacturing and technologies, taking into account technological, commercial, legislative, and other aspects; protect the intellectual property right.
PLO 8	to use modern methods and equipment for experimental research of technologies, manufacturing processes, materials, and products of the consumer industry, to apply relevant methods for planning and statistical processing of experimental data.
PLO 9	to organize the work of the research or production team, to manage its activities in accordance with applicable law and internal regulations of the enterprise / institution, ensure the team efficiency and work quality, occupational safety, and the environmental protection.
PLO 10	to learn new knowledge and skills individually, to help teammates in learning.
PLO 11	to use up-to-day methods and tools of mathematical and computer modeling, experimental research of technologies and manufacturing processes of textile and consumer industries, to provide practical recommendations based on research results.
PLO 12	to monitor compliance with safe at each workplace and timely update the instructions based on existing conditions, taking into account the requirements of occupational safety, industrial sanitation, and fire protection.
PLO 13	to develop and teach courses in HEI related to the manufacturing and technologies of the textile and consumer industries.

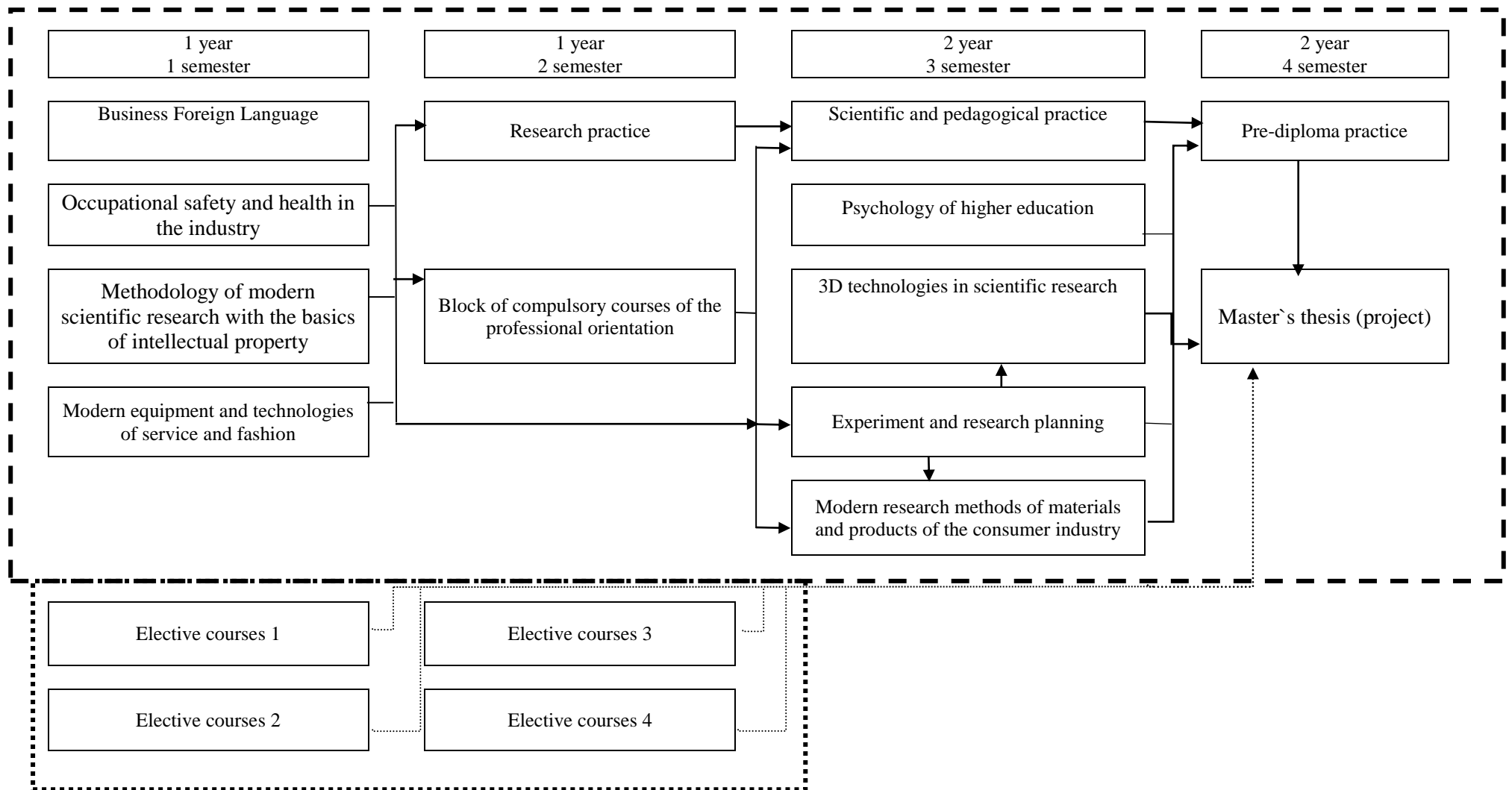
Forming reasoning:	
PLO 14	to communicate own conclusions, research and innovation results to specialists and non-specialists, in particular to colleagues, business partners, and students, to argue own position clearly and unambiguous.
PLO 15	to evaluate objectively the quality and efficiency of own work, the work of own and other teams.
PLO 16	to find the necessary information in the scientific literature, patents, databases, other sources; to evaluate, process, and critically analyze it for the development and implementation of scientific and innovative projects.
PLO 17	to understand the broad interdisciplinary context of textile and consumer industries technologies, take into account legal, economic, social, ethical, environmental aspects in solving complex scientific, engineering, and manufacturing problems and making appropriate decisions.
PLO 18	to predict the development of technologies and manufacturing, market conditions in the textile and consumer industries.
8 – Resources 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. High professionals with experience in research / management / innovation / creative work in the consumer industry field are involved in the training.
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	The program provides the possibility for academic mobility in some components provided the acquisition of general and / or professional competencies.
International credit mobility	The program develops prospects for internships and participation in research projects and academic mobility programs abroad.
Studying for foreign students	Studying of foreign students is according to accredited programs.

List of components (study courses) of the scientific study program of the second (master'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
Compulsory components			
General courses cycle			
CC 01	Business Foreign Language (english , german , france)	3	credit
CC 02	Occupational safety and health in the industry	3	exam
CC 03	Methodology of modern scientific research with the basics of intellectual property	3	exam
	Total for the cycle	9	
Professional courses cycle			
CC 04	Psychology of higher education	6	exam
CC 05	Modern equipment and technologies of service and fashion	3	credit
CC 06	3D technologies in scientific research	6	credit
CC 07	Experiment and research planning	6	exam
CC 08	Modern research methods of materials and products of the consumer industry	6	exam
Block 1 of professional orientation " Fashion Industry"			
CC 13.1	Commercial modeling of fashion industry products	6	exam
CC 14.1	Marketing, design, and manufacture of the fashion industry products	3	exam
CC 15.1	Spatial design of fashion industry products	3	exam
Block 2 of professional orientation " Knitwear Technology and Design "			
CC 13.2	Manufacture design in the knitting industry	6	exam
CC 14.2	Computer technologies in knitwear manufacture	6	exam
Block 3 of professional orientation "Footwear and Haberdashery Design"			
CC 13.3	Commercial modeling and design of shoes, accessories based on spatial design	6	exam
CC 14.3	Innovative technologies at the footwear and leather haberdashery enterprises	3	exam
CC 15.3	Computer technologies in the design and manufacture of leather products	3	exam
Block 4 of professional orientation " Design and Technology of Sewing Products "			
CC 13.4	Competitiveness of garments	3	exam
CC 14.4	Verification of conformity in the garment industry	3	exam
CC 15.4	Methodology of labor processes analysis for garment production	3	exam
CC 16.4	Special technologies for garments manufacturing from the advanced materials	3	exam
Block 5 of professional orientation " Technologies and Design of Fur Products»			
CC 13.5	Competitiveness of garments	3	exam
CC 14.5	Innovative technologies for manufacture leather and fur products	3	exam
CC 15.5	Technical design of leather and fur garments	3	exam
CC 16.5	Special technologies for manufacturing leather and fur garments	3	exam
Block 6 of professional orientation "Styling, Design and Decoration of consumer industry products"			

Cod	Components of the study program (study courses, courses projects (works), practices, qualification work)	Number of credits	Form of control
1	2	3	4
CC 13.6	Advanced technologies of design and artistic decoration of products	6	exam
CC 14.6	Advanced methods for clothing design	3	exam
CC 15.6	System-structural design of products for various purposes	3	exam
	Total for the cycle	45	
	Practical training		
CC 9	Research practice	6	credit
CC 10	Scientific and pedagogical practice	6	credit
CC 11	Pre-diploma practice	9	credit
CC 12	Master`s thesis (project)	21	attestation
	Total for the cycle	42	
Total credits for Compulsory components		96	
Elective components			
EC	Courses for student`s choice	24	credit
TOTAL CREDITS		120	

2.2. Structural and logical scheme of master's degree scientific study program « Consumer industry technologies »



3. Attestation

Form of attestation	attestation is through the public defense of the master's thesis.
Document of higher education	Master's diploma with educational qualification: master's degree in the consumer industry technologies (educational program "Consumer industry technologies")

4. Matrix of correspondence of program competencies to components (CC) of the scientific study program

	GC1	GC2	GC3	GC4	GC5	GC6	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
CC 1			•	•														•
CC 2									•	•								
CC 3	•	•					•	•			•					•	•	
CC 4				•	•					•				•				
CC 5	•						•					•						
CC 6							•				•				•			
CC 7						•							•		•		•	
CC 8						•							•		•			
CC 13.1	•	•		•	•		•	•		•		•						
CC 14.1	•	•			•		•	•		•		•						
CC 15.1	•	•		•	•		•	•		•		•						
CC 13.2	•	•					•			•		•						
CC 14.2	•						•				•	•						
CC 13.3	•	•		•	•		•	•		•		•						
CC 14.3	•						•			•								
CC 15.3	•	•			•		•	•			•	•			•			
CC 13.4							•					•			•			
CC 14.4	•						•		•									
CC 12.4							•					•	•					
CC 15.4							•	•				•						
CC 13.5							•				•	•		•	•			
CC 14.5							•	•		•								
CC 15.5							•	•				•						
CC 16.5							•	•				•						
CC 13.6	•						•			•		•						
CC 14.6	•						•	•			•	•						
CC 15.6				•	•		•	•				•		•				
CC 9	•				•			•		•					•	•		
CC 10		•		•										•				•
CC 11	•				•					•					•	•		•
CC 12	•	•					•			•		•						

5. Matrix for providing program learning outcomes (PLO) with relevant components (CC) of the scientific study program

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PLO 13	PLO 14	PLO 15	PLO 16	PLO 17	PLO 18
CC 1						•				•				•				
CC 2		•							•			•					•	
CC 3			•		•		•	•		•						•		•
CC 4									•	•			•	•				
CC 5	•						•			•					•	•		•
CC 6	•						•	•		•								
CC 7				•				•			•							
CC 8				•	•			•		•								
CC 13.1	•		•				•							•	•	•		•
CC 14.1	•				•		•							•		•	•	•
CC 15.1	•						•				•				•			
CC 13.2	•						•			•	•				•		•	•
CC 14.2	•						•			•								•
CC 13.3	•		•				•							•	•	•		•
CC 14.3	•						•										•	•
CC 15.3	•						•			•	•				•			
CC 13.4	•				•			•										
CC 14.4	•				•		•	•	•									
CC 12.4	•				•			•			•							
CC 15.4	•						•				•					•		
CC 13.5	•				•			•			•							•
CC 14.5	•						•		•					•	•	•		
CC 15.5	•						•				•					•		
CC 16.5	•						•				•					•		
CC 13.6	•						•			•				•				•
CC 14.6	•						•	•									•	•
CC 15.6	•						•				•			•		•		
CC 9	•				•		•	•	•		•	•		•		•	•	
CC 10						•							•	•				
CC 11							•			•	•	•		•	•	•	•	•
CC 12							•			•	•			•	•	•	•	•