The implementation

of the International educational grant project of the European Union

"Fashion TEX European Academy for Young Designers to Study Innovative Technologies in Digital Fashion Design"
supported by the "Creative Europe"

in the educational process of

Kyiv National University of Technologies and Design

https://culture.ec.europa.eu/de/creative-europe/projects/search/details/101127950
https://en.knutd.edu.ua/

2023-2026

About KNUTD

- **The mission** of the University is to promote sustainable development of the region and the country; meet the educational needs of the population regardless of place of residence/stay; train competitive specialists for the economy; participate actively in the personal development of each person, his education and improvement of abilities.
- **The purpose** of the University is to teach and educate young people; provide high-quality educational services necessary for society, regardless of the place of residence / stay of consumers; develop the personal potential of participants in the educational and scientific process, their creative abilities, active social and civic position.
- **The goal** is to position the formation of KNUTD as the best and most influential university of applied research at the international level with a high-quality educational and scientific reputation.
- **The task** of the University is to ensure high-quality educational activities for higher education seekers in compliance with safety conditions; development of scientific research and transfer of technologies and innovations to the real sector of the economy; integration into the world market of science and education.

About KNUTD

General characteristics

No.	Performance indicators	Quantitative parameters
1.	Licensed volume of the University, persons during the year	7536
	including by degrees (educational and qualification levels):	
	- the initial level (short cycle) of higher education	20
	- junior bachelor	1835
	- bachelor	3490
	- master	2020
	- Doctor of Philosophy	171
2.	Number of applicants for higher education together, persons:	10642
	including by forms of education:	
	- full-time	8816
	- part-time	1826
3.	Number of specialties for which specialists are trained:	
	- junior bachelor	9
	- bachelor	38
	- master	21
	- Doctor of Philosophy	17
	- Doctor of Science	10
4.	Number of departments	27
	of them degree-granting departments	27
5.	Number of faculties	6
6.	Number of institutes	6
7.	Number of centres and educational complexes	9
8.	Number of university-wide divisions	21
9.	Number of specialized scientific councils for defending dissertations	6

The organization of educational, methodical, organizational and scientific work of students at the University is provided by:

3 colleges:
- Professional College of Arts and Design, Kyiv National University of Technologies and Design;
- Lviv College of Fashion Industry, Kyiv National University of Technologies and Design;
-Chernihiv Professional College of Engineering and Design, Kyiv National University of Technologies and Design.

5 faculties:
- Design;
- Chemical and Biopharmaceutical Technologies;
- Arts and Fashion;
- Mechatronics and Computer Technologies;
-Management and Business Design.

7 institutes:
- Institute of Culture and Creative Industries;
- Institute of Law and Modern Technologies;
- Institute of Engineering and Information Technologies;
– International Institute of Postgraduate and Doctoral Studies;
- International Institute of Academic Mobility and Cooperation
- Kyiv College of Qilu University of Technology;
-Research Institute of Economics.

9 centres:
– Training center for foreigners;
– Educational and scientific complex of military training;
– Educational center "Student Cafe";
– Labor and career center;
– Student center of fashion, creative ideas and creativity;
– Ukrainian-Polish educational center;
– Ukrainian-Azerbaijani cultural and educational center;
– Center for energy efficiency;
- Recreation center "Sports and recreation camp "Youth".

Our specialisation and the educational programmes

Specialty:

- 182 Technologies of light industry.

Educational Programmes:

- Modelling, design and artistic decoration of products of light industry;
- Design and Technology of Sewing Products.

Education levels:

- Bachelor Degree (4 years);
- Master Degree (1,5 years);
- Doctor of Philosophy Degree (4 years);
- Doctor of Science Degree (2 years).

Number of students:

- 25-50 students each year in every level.

Forms of education:

- daily (included individual schedule);
- extramural;
- remote.

The implementation Clo3D in the educational process

- Plan for 2024/2025

Mandatory discipline	Discipline of free choice	Student research group	Fashion Show
Computer aided design *Semesters: 7, 8.* *Volume: total number of hours – 270;* *the number of ECTS credits is 9.*	CAD technologies in Fashion Industry *Volume: total number of hours – 90;* *the number of ECTS credits is 3.*	Clothing design using digital technologies *Volume: total number of hours – 12;*	1. International Competition For Young Fashion Designers "Pecherski Kashtany" 2. International competition of young designers «Digital fashion»

- Plan for 2025/2026

Mandatory discipline	Discipline of free choice	Student research group	Fashion Show	Masters diploma
1. Computer aided design *Semesters: 6.* *Volume: total number of hours – 90;* *the number of ECTS credits is 3.* 2. CAD technologies in clothes *Semesters: 7, 8.* *Volume: total number of hours – 270;* *the number of ECTS credits is 9.*	1. CAD technologies in Fashion Industry *Volume: total number of hours – 90;* *the number of ECTS credits is 3.* 2. 3D in Fashion Industry ???? *Volume: total number of hours – 90;* *the number of ECTS credits is 3.*	Clothing design using digital technologies *Volume: total number of hours – 12;*	1. International Competition For Young Fashion Designers "Pecherski Kashtany" *The nomination DIGITAL-FASHION in all Contest* 2. International competition of young designers «Digital fashion» 3. Fashion show of the project Fashion TEX	*Volume: total number of hours – 630;* *the number of ECTS credits is 21.*

Curriculum of the discipline "Computer aided design»

Discipline status is mandatory.

Teacher of the Department of Fashion and Style: Alla Rubanka, Associate Professor.

The level of higher education is first (bachelor).

Specialty - 182 Technologies of light industry.

Educational programme – Modelling, design and artistic decoration of products of light industry.

Necessary prerequisites: successful mastery of information systems and technologies, engineering and computer graphics, basics of clothing design, ergonomics, material science, basics of design in gand manufacturing clothes, technology of sewing products, design of sewing products, artistic and graphic composition.

1. Course summary:

Semesters: 7, 8.

Volume: total number of hours – 270; the number of ECTS credits is 9.

The purpose of the discipline is to form general and professional competencies among the student of higher education, namely: the ability to apply knowledge in practical situations; skills in using information and communication technologies; the ability to learn and master modern knowledge; ability to ensure efficiency and quality of design and technological works in light industry; the ability to develop collections of clothing models of various assortments and purposes for women, men and children from various materials, including knitwear, leather, fur, etc.; carry out design-projection of modern clothing models taking into account current fashion trends and innovations in the fashion industry, including using modern computer programmes; the ability to draw up design and technological documentation for the manufacture of products in compliance with existing regulatory requirements in the conditions of sewing production of various capacities.

The outcomes of the discipline:

know: basic concepts of computer graphics; modern ideas about the principles of structural and functional organization at technological processes of automated designing of sewing products; possibilities and functions of modern computer programmes for designing clothes; possibilities of design programmes for creating and processing artistic images; features of design, modelling and design of clothing patterns in automated mode; modern technologies of three-dimensional clothing design;

be able to: use modern information systems and technologies, general and specialized software in professional activities; to have practical skills in the use of various graphic means and techniques of composition in the artistic design of clothes and other products of light industry; apply modern and promising methods of designing clothes of various silhouette and three-dimensional shapes, taking into account the basic laws of composition and plastic properties of materials; demonstrate theoretical and experimental skills regarding the application of modern methods of modelling and artistic decoration for the development of models and collections of clothing models using modern fashion trends from various creative sources, style solutions and achievements of the field, science, technology and art based on a systematic approach.

Able to demonstrate: the ability to develop and process images of clothing models, product collections of various assortments, taking into account current fashion trends and innovations in the fashion industry, collage, brand logo, advertising poster, perform artistic design of product images, display the colour, pattern and texture of the material in modern design programmes; to build drawings of basic and model constructions of clothing of various assortments and purposes, structural and decorative elements, design of patterns and design and construction documentation using clothing CAD;

to have skills: work in vector and raster graphics programmes Xara Designer Pro, Adobe Photoshop, etc. and in automated clothing design systems JULIVI, Grazia (Ukraine), Assyst (Germany); Clo3D.

Curriculum of the discipline "Computer aided design»

Course content:

Topic 1.

- Basics of computer graphics. Formats of computer graphics. Colour models. Features of workin Xara, Adobe Photoshop, Coral Draw, etc. programmes. Development of sketches and technical drawings of clothing models.

Topic 2.

- Basic principles of design in the development of computer graphics products. connections. Modular grid. Typography. Development of a collection of models, a logo, an advertising poster in modern design programmes.

Topic 3.

- Clo3D programmes. Saving and file formats. Gizmo. Mesh, particle distance and additional thickness. Avatar in Clo3D. Avatar's types and standard sizes. Avatar editor. Additional measurements. Pattern in Clo3D. Import in Ai or Pdf pattern. Pattern by tracing an image. Flat pattern drafting: Create a pattern.

Topic 4.

- General principles of CAD construction of sewing products. The sequence of development of new clothing models in modern CAD programmes. Stages of automated clothing design. CAD classification of clothes of the world's leading manufacturers.

Topic 5.

- Types of CAD support. Software and technical support of clothing CAD.

Topic 6.

- Development of basic and model constructions of clothing in an automated mode. Peculiarities of development of drawings of parts of sewing products in different design modes of CAD.

Topic 7.

- Comparative characteristics of modern CAD. Modern technologies of three-dimensional design and design of clothes. Prospects for the development of CAD of sewing products.

Topic 8.

- Create a virtual garment in Clo3D. Pattern to garment. Arrangement points and bounding volumes. Sewing. Dress the avatar. Freeze, strengthen, solidify, deactivate, hide. Select Mesh tool. Fitting in Clo3D. Schematicrender. Design development in Clo3D. Fabric in Clo3D. Presentations of the garments in Clo3D.

Student research group "Clothing design using digital technologies"

Location: rooms 1-0511, 1-0303, building 1, KNUTD
Organizers:
Department of fashion and style
Leader of the group:
Ph.D., Assoc. Prof. Alla Rubanka
PhD, senior lecturer Navolska L.
assist. Mamchenko Y.

The purpose of the research group: conducting theoretical and experimental research to improve the design of clothing for various purposes and other products of light industry using information technologies.

Main tasks: analysis of the possibilities of using modern information technologies at various stages of development of the design of clothing for various purposes and other products of light industry; systematization of information on the possibilities of using modern information technologies, in particular 2D and 3D modelling programmes, at various stages of designing clothing for various purposes and other light industry products; a practical comparison of the results of the application of modern information technologies in the development of the design of complex volumetric and spatial forms of clothing; improvement of the clothing design process using modern information technologies; preparation and development of informational and methodical provision of automated clothing design systems for various stages of clothing design.

The topic of scientific research of the student group: improvement of the design of clothing of various assortments and purposes.

Publications of our team about digital fashion

Participation in scientific conferences with the publication of proceedings:

- 1. Yezhova O., Ivanytska A. Symbolism as a feature of designing creative collections of modern Ukrainian fashion designers. Methodology of modern scientific research: a collection of scientific papers of the participants of the Jubilee XX International Scientific and Practical Conference (February 22–23, 2024, Kharkiv). P. 248-252. https://doi.org/10.5281/zenodo.11527851.
- 2. Wu S., Yezhova O. Digital fashion design innovation based on intangible cultural heritage. Materials of the VI International Scientific and Practical Conference " Topical issues of modern design" (KNUTD, April 25, 2024, Kyiv, Ukraine). T.1.
- 3. Molodan A.M., Lazariv E.M., Rubanka A.I., Mamchenko Y.O. Features of the development of virtual clothing models in the CLO3D program. Comprehensive quality assurance of technological processes and systems (KZYATPS - 2024): materials of theses of reports of the XIII International Scientific and Practical Conference, (Chernihiv, May 25-26, 2024) - In 2 volumes - Volume 1. - Chernihiv : Chernihiv Polytechnic University, 2024

Scientific publications in professional journals of category B

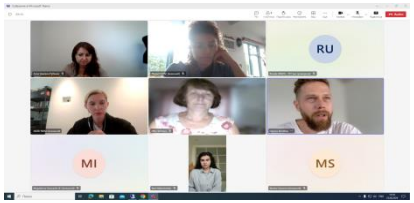
- 1. Protsyk B. O., Pashkevych K. L., Gerasymenko O. D., Liuklian N. R., Kass B. V.. Analysis of features of electronic mannequins and body scanners for clothing design and visualization. Theory and Practice of Design. 2024. No. 1(31). P. 160–170. https://doi.org/10.32782/2415-8151.2024.31.19
- 2. Protsyk B. O., Pashkevych K. L., Gerasymenko O. D., Liuklian N. R. Ways of the use of digital clothing in the modern fashion industry. Ukrainian Art Discourse. 2023. No. 6. P. 73-81. http://uad-jrnl.nau.in.ua/index.php/uad/article/view/195/163 https://doi.org/10.32782/uad.2023.6.9.
- 3. Yezhova O. Professional Training of Future Specialists in the Field of Technology and Design Using Digital Technologies. Journal of Vasyl Stefanyk Precarpathian National University. 2024. T. 11. No. 1. P. 20-24. https://doi.org/10.15330/jpnu.11.1.20-24.
- 4. Wu S., Yezhova O. V. Features of contemporary Chinese style in digital fashion design: cases of fashion industry products design. Art and Design. 2023. No. 3(23). P. 68–78. https://doi.org/10.30857/2617-0272.2023.3.6

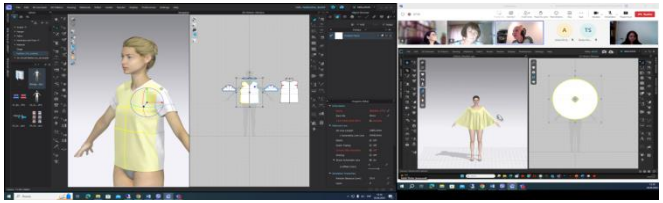
Scientific publications in international journals

- 1. Vorobchuk M., Pashkevych K., Yezhova O., Protsyk B. QR code design: From digital graphics to environmental, product and fashion design. Journal of Graphic Engineering and Design. 2024. T. 15. No. 2. P. 51-57. https://doi.org/10.24867/JGED-2024-2-051 (Scopus indexed).

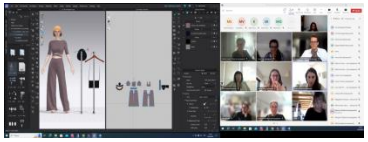
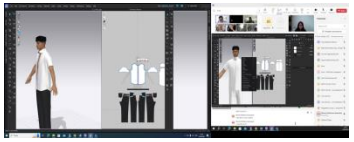
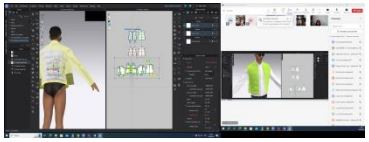
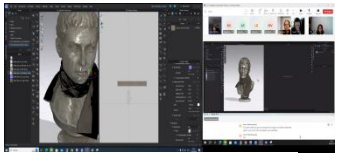
Feedback regarding the training of the lecturers in Clo3D during the past few months

- Courses from Adele Parker





- Courses from CLO Virtual Fashion

CLO Virtual Fashion

This is to confirm that

Alla Rubanka

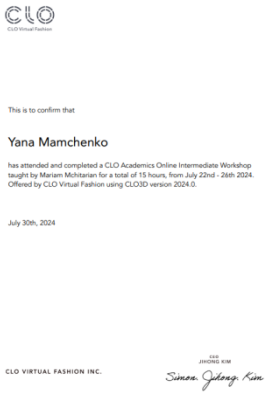
has attended and completed a CLO Academics Online Basic Workshop taught by Mariam Mchitarian for a total of 15 hours, from June 24th - 28th 2024. Offered by CLO Virtual Fashion using CLO3D version 2024.0.

July 2nd, 2024

CLO VIRTUAL FASHION INC.

CEO JIHONG KIM

Simon Jihong Kim


CLO Virtual Fashion

This is to confirm that

Yana Mamchenko

has attended and completed a CLO Academics Online Intermediate Workshop taught by Mariam Mchitarian for a total of 15 hours, from July 22nd - 26th 2024. Offered by CLO Virtual Fashion using CLO3D version 2024.0.

July 30th, 2024

CLO VIRTUAL FASHION INC.

CEO JIHONG KIM

Simon Jihong Kim

CLO Virtual Fashion

This is to confirm that

Yana Mamchenko

has attended and completed a CLO Academics Online Advanced Workshop taught by Simon Völkl, Vivian Böhmer and Daniel Mohr for a total of 15 hours, from August 19th - 23rd 2024. Offered by CLO Virtual Fashion using CLO3D version 2024.1.

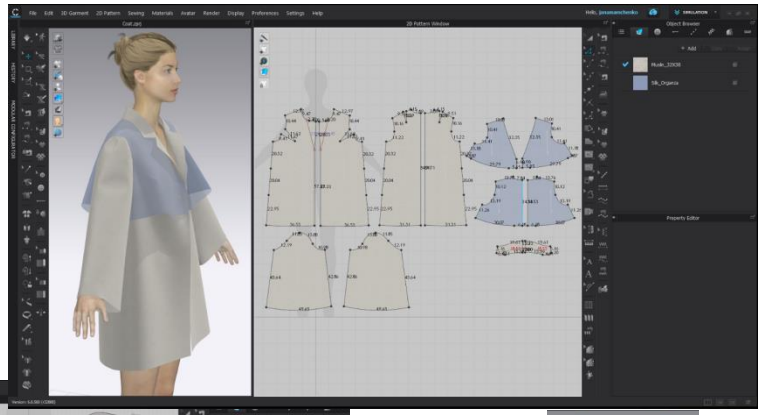
September 2nd, 2024

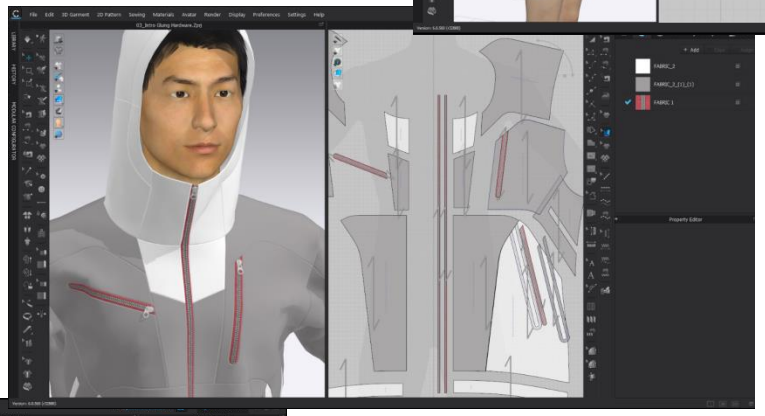
CLO VIRTUAL FASHION INC.

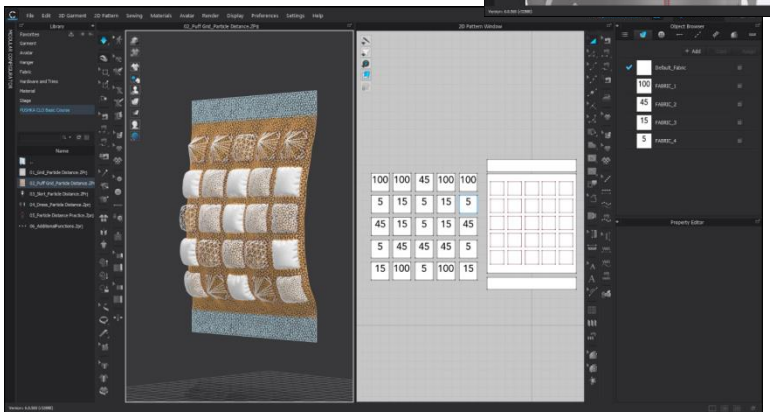
CEO JIHONG KIM

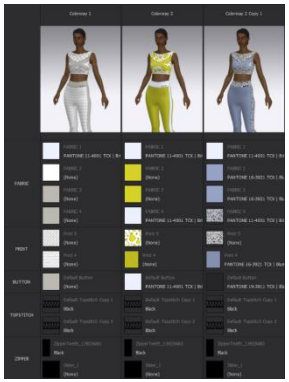
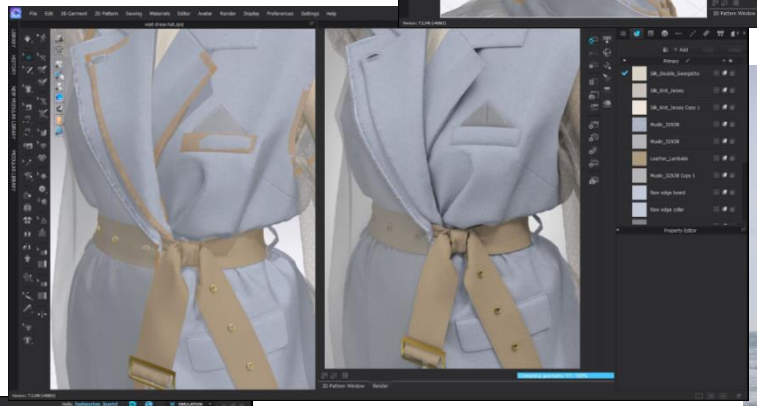
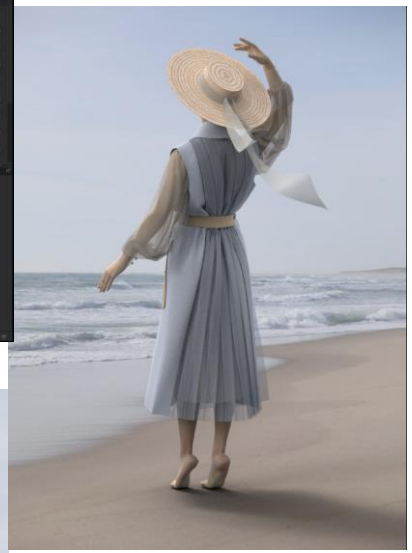
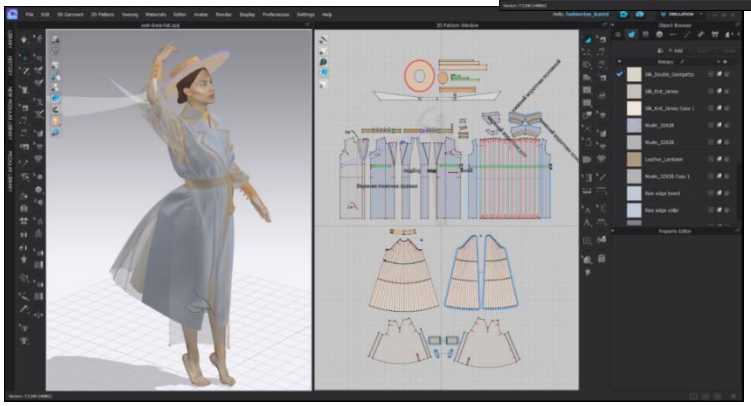
Simon Jihong Kim

Digital works of our lectors and students in Clo3D









Digital works of our lectors and students in Clo3D