Subject Benchmark Statement of Higher Education Programme in Design, Industrial Design, Fashion Design, Textile Design

I and II Levels of Higher Education

VI and VII Levels of the National Qualifications Framework



I. Introduction

The Subject Benchmark Statements of Higher Education in Design, Industrial Design, Fashion Design and Textile Design represent the standard of academic education, which is based on the Georgian National Qualifications Framework, the European Qualifications Framework for Higher Education, the European Qualifications Framework for Lifelong Learning, labor market requirements, national and international standards, best local and international practices and legislative requirements and reflects the minimum requirements for learning outcomes corresponding to levels 6 and 7 of the National Qualifications Framework and the teaching-learning assessment methods and other essential features needed to achieve the above mentioned learning outcomes.

This benchmark statements describe the knowledge, skills, responsibility and autonomy that a student will acquire after completing a relevant Bachelor/Master degree programme in design, industrial design, fashion design and textile design. The subject benchmark statement set a minimum standard of learning outcomes for a graduate student, however, higher education institutions are authorized to define higher learning outcomes based on the content and objectives of the programme, taking into account the best local and international practices, in agreement with programme coordinators and staff involved in the development/implementation of the programme.

The learning outcomes determined by the subject benchmark statements are mandatory for all higher education institutions, except for the provisions of a recommendatory nature (in relation to teaching-learning and assessment).

The term of validity for the Subject Benchmark Statement is 5 years.

The name of the subject benchmark statement in English is: Subject Benchmark Statement of Design, Industrial Design, Fashion Design, Textile Design.

The aim of the subject benchmark statement is to facilitate the elaboration and development, diversity and flexibility of relevant bachelor's and master's educational programmes in the fields of design, industrial design, fashion design and textile design. Its aim, also, is to promote the international recognition of the qualifications awarded within the framework of the above-mentioned fields of study, the mobility of students and the employment of graduates both in the local and international employment market.

It is recommended to introduce the present Subject Benchmark Statement to:

- •academic, administrative and visiting staff of the higher education institution, who are involved in the elaboration/development and review of educational programme in design, as well as in the process of developing and implementing educational courses;
- •to school leavers who plan to continue their studies at educational programmes corresponding to the fields of study described by the subject benchmark statement;



- •to students studying design, industrial design, fashion design and textile design at the I or II level of higher education;
- •to graduates who have completed their studies at VI, VII level educational programmes corresponding to the fields of study covered by this document before and after the approval of the present subject benchmark statement;
- •to employers who are interested in employing graduates with the competencies of educational programmes described by the subject benchmark statement;
- •to accreditation experts responsible for determining compliance of these educational programmes with accreditation standards;

The elaboration of the subject benchmark statement is conditioned by the need that the applicable higher education programmes are in line with the national qualifications framework, with the classifier of the field of study and the labor market requirements.

II. Description of the Field of Study

Design - generalizes various types of design activities, aiming at the formation of utilitarian-aesthetic qualities of the subject environment. Design is contradictory, mosaic, dynamically evolving and socially demanding. Its integral character ensures the interconnection of different fields (philosophy, sociology, aesthetics, ecology, traditional and innovative technologies, etc.)

Design is considered as a universal project method, which is one of the most influential and progressive types of creative design activity, associated with modern scientific and technical achievements, it provides a way to implement complex design of all types of products. In the market economy, design has become a special type of professional activity, it is in demand in the industry and it is becoming the center of the formation of a new type of culture, a new worldview.

Educational programs used to consider design as a branch focused only on the aesthetic and utilitarian aspect of the subject, but today customer-oriented and socially responsible approaches have gained more importance. These circumstances led to a re-thinking of design education and its academic foundations.

Design education involves the synergy combining theoretical, practical and creative aspects of research in the teaching-learning process to achieve optimal results.

Higher education programmes in design are focused on training designers according to modern international standards, within the competences determined by the levels of the national qualifications framework at the level of higher education.

The professional activity of designers in the modern world is perceived as an intellectual process based on closely connected theoretical knowledge, research activities and practical skills.

Competencies of a graduate of a higher education programme in design must be in line with the requirements of the labor market. After mastering these competencies, graduates should be able to connect business education with design practice: application of conceptual and/or consumer product creation skills;

Synergy of traditional techniques and modern technologies; production, marketing, as well as modern economic, industrial, technical-technological foundations and their unification in the framework of the brand, the use of effective business management solutions, etc.

Accordingly, the educational programme should include teaching of the following disciplines: marketing, product development, product production, basics of entrepreneurship, PR, etc. Also, along with communication technologies, it is advisable to teach the basics of economics, sociology, psychology, and ergonomics. Along with raising the level of theoretical knowledge of educational disciplines, it is important to develop a designer's vision, transition to problem-based learning, etc. This principle of educational practice is the basis of the international design-educational system and is based on the interaction of higher education design with industry.

Active involvement of business sector and creative leaders is necessary in the process of implementation of educational programs in design.

The mentioned approaches should be taken into account within the educational programmes of the bachelor's and master's level corresponding to the fields of study covered by this subject benchmark statement.

2.1. Design

Higher education programmes applicable to the field of study in design are diverse in content and include teaching with various combinations of design, art, relevant technologies and related fields.

Design focuses on subjective creativity, while higher education is based on rational objectivity. Teaching design in an academic framework can create both a rational and a new complex approach based on creative experience.

Such an approach gives the depth and variety to the design education programme to match the academic level, where studio projects of different fields of design are considered not as an issue/problem, but as a system, the content and value of which needs research and reaches the final result - creative thinking, along with a rational approach.

2.2 Fashion Design

Fashion design, as a part of the subject environment, includes creative and rational design - exclusive and mass-produced clothes, shoes, accessories, textiles, creative costume/form-object, overalls, etc.

Fashion design is one of the important branches in the design field, which is based on the close relationship between art and business. Its purpose is to design the clothes the way to satisfy the material and spiritual needs of the man.

International fashion industry trademark registry contains several dozen names. In order to work in such a circle, in addition to field disciplines, a specialist needs a clear idea of design strategies and their management, knowledge of the entire algorithm of the industrial cycle, etc.



Fashion industry, establishment of SMEs, key market needs and delivery of specialized products, growing demand for exclusive high-quality designer products, innovative technologies, new special equipment, etc. - requires to prepare a new type of specialist.

An important segment of fashion design educational programmes is project-based learning, that covers personal, subjective experience and creative intuition, research, determining the purpose, technical and artistic illustration, selection/processing of materials, construction/modeling, technology, sample/mock-up, technical documentation, finished product taking into account project activities.

2.3 Industrial Design

Industrial design is applied to the care of the physical components of the artificial environment or to their unity by optimally synthesizing utilitarian-functional, aesthetic-stylistic and economic-ecological issues. Industrial design covers the whole range of artificial physical environment, including the following: household, industrial, transport, service, special purpose and other products, objects and their composites, equipment for economic and environmental improvement, and other design solutions. It also has a partial thematic overlap with architecture on the one hand, and graphic design on the other.

Industrial design is focused on mass-produced products, but according to specifications includes exclusive and small batch products, tuning, customization, upcycling and recycling. Thus, industrial design represents a kind of marker of industrial-technological achievements, the field of creative materialization of accumulated knowledge and capabilities.

Industrial design strategy is based on three types of expediency, the so-called sustainability: social, economic and ecological. Thus, its product must always respond to the requirements of social need, economic profitability and ecological feasibility.

In the context of social sustainability, along with functional issues, the aesthetic-stylistic aspect is also of particular importance, adequacy to the constantly perfecting process and ensuring compliance with the requirements of the high taste.

In order to achieve the mentioned goals, the teaching of industrial design is a complex, algorithmic process, in which scientific-theoretical knowledge and creative-performing skills synergistically create a base for constantly developing professional competence, regenerative creative platform for educational-research and creative-practical activity.

2.4 Textile Design

Textiles - textile fiber materials and products are an important component of human living environment. It is used in the form of objects and items of individual household use, in the interior and exterior, in vehicles,

in various fields of medicine, sports, military and technology, during production and labor activities, during rest, on land, in water and in air. The appearance and properties of textile products have a certain influence on the quality of life and emotional state of a person. At the same time, textile is an important part of the cultural diversity of any country, and its protection and development is one of the priority issues.

Textile (meaning produced from natural and chemical fibers: various types of plain and patterned yarn and thread, fabric, knitwear and non-woven fabric, multi-functional and multi-layer textile composite materials) design is related to the researches carried out in order to improve the production of raw materials and modern textile materials and their consumer properties and quality.

Textile design refers to the process of creating products in a traditional, digital, experimental manner. Its main task is to create both a work of art and a utilitarian product of specified consumer features and physical-mechanical properties, creatively through intelligent selection and distribution, which can be produced both as a single sample as well as serial production.

The disciplines of textile design are diverse. Its teaching can be divided into separate areas: Design of woven, non-woven, chemically treated (printed, dyed, painted, having special properties) and other products.

The field of textile design requires complex work. The creative process, theoretical and practical knowledge and skills are followed by internship which is a prerequisite for creating a new product easily and quickly. At each stage of the process, environmental factors, waste minimization and reusability must be considered.

Thus, the process of teaching textile design includes multifaceted, creative, research, theoretical and practical activities, in which both textile artists and research technologists are involved.

III. Learning Outcomes

The learning outcomes provided by the subject benchmark statement aims at the acquisition/development of knowledge, skills, responsibility and autonomy that are required of the student upon graduation of the relevant cycle (bachelor's or master's).

The institution is authorized to determine higher level learning outcomes depending on the content and goals of the programme.

The higher education institution is authorized to formulate the learning outcomes of the education programme without dividing them into three categories (knowledge and understanding, skills, responsibility and autonomy).

It is noteworthy that the goals and learning outcomes formulated in the higher education programme of design determine the issues covered by the academic disciplines related to design and their share in the educational programme.



Knowledge and Understanding

Upon completion the Bachelor's degree in Design, a graduate:

- •Demonstrates broad general knowledge of design theory and design-related academic fields such as about the latest achievements in the arts, communication technologies, as well as social sciences and humanities, business relations and the latest developments fields;
- •Demonstrates knowledge of modern practical and theoretical methods related to design and determines constructions, technologies, materials and rationally uses them to obtain the desired result;
- Defines and describes the necessary procedures and processes for the implementation of the projects, the necessary technical means for design;
- Takes into account the interests of the customer and the consumer in design projects;

Skills

- •In the process of working on a design project, s/he uses the theoretical knowledge and training/internship experience received within the framework of the educational programme;
- •Plans and selects materials, technical-technological/aesthetic/operational properties in order to perform tasks;
- Carries out design projects independently with a creative approach, in accordance with predetermined guidelines and/or within the scope of own competencies.
- •Creates different types of products using information and communication technologies and presents them to interested parties;
- Develops a design project in accordance with the principles of academic integrity and documents it, based on the analysis of the information collected for the assignment and using research methods.

Responsibility and Autonomy

- •Follows the professional ethics when developing and implementing design projects, takes into account environmental factors and works both individually and in compliance with teamwork principles;
- Determines own learning needs and plans career development taking into account the market economy.

3.2. Master's Degree

Knowledge and Understanding

Upon completion the Master's degree in Design, a graduate:

- Describes the main concepts, theories, latest trends and technological methods/solutions of the design project;
- •Discusses in depth the main stages of development of existing concepts and technologies in the field



of design;

• Defines the processes of creating and selling a designer product.

Skills

- •Independently explores new approaches and makes optimal decisions in the process of developing design projects;
- Presents research results (project/work/product) both to the professional society and to the general public based on the analysis of the researched information, using modern information and communication technologies;
- •Provides the optimal ratio of utilitarian and aesthetic, technical and human, collective and individual aspects in design projects;
- Manages the formation of design project/work and creates the product using the latest methods and technologies.

Responsibility and Autonomy

- Follows the professional ethics and academic standards in working or/and studying environment, develops his/her own abilities.
- Makes independent decisions taking into account the interests of the customer/consumer when working in the field of design.

IV. Teaching, Learning and Evaluation

4.1. Teaching and Learning Methods

Teaching-learning and assessment methods should be based on the principles of student-centered teaching and respond to general goals and learning outcomes. Besides, in addition to the specific skills applicable to the field, these methods should promote the development of transferable skills of a student. The teaching-learning methods and evaluation criteria used within the educational programmes in the field of design, should allow the student to determine the general compliance of the learning outcomes achieved by him/her within the programme with the current subject benchmark statements. Assessment methods should also include feedback from the staff implementing the programme to students to improve their knowledge, skills and values in the future.

The most common teaching methods include lectures, theoretical and practical classes, including interactive learning, project and problem-based learning, individual and group work, and other forms of teaching.

Depending on the content and goals of the programme, the higher education institution is authorized to use methods selected from the listed below or other methods.

At all stages of designing, theoretical and practical work is recommended to be carried out using a unified

design structure.

- •Understanding the problematic situation;
- Pre-project analysis;
- Determining the principles of the task and means of solving it;
- •Sketchy search for solutions;
- Formation of the product type;
- •Situation analysis of the project;
- •Design works.

Methodical design process is conditionally divided into four main stages:

- •Informative;
- Analytical related to research;
- Synthetic;
- •Communicative -related to practical part;

Design-methods serve to stimulate the generation of ideas and create new products, technologies and solutions based on them. In the teaching-learning process, the methods of design projection are selected according to the nature and purpose of the product.

Traditional design methods can no longer respond to the new challenges of the field, when solving a creative problem. Therefore, it is important to activate creative search in design, which aims to develop the designer's project thinking and activate the design process itself.

Modern methodological principles allow complex approaches to the teaching-learning process. It is also possible to use methods that are not specified in the "teaching methods" section, but are mentioned in the curriculum syllabus.

Modern heuristic methods of designing are ways of solving problematic tasks (creative, non-standard), which, as a rule, are opposed to formal methods and develop non-standard creative thinking

- •Method of deconstruction when projecting a form, it means breaking up the stereotype, reevaluating the classical laws of beauty and harmony. it is characterized by: free-form manipulation, visual "destruction", creating a feeling of complete disorder, absence of main parts in the form, asymmetry;
- •Brainstorming generating ideas as a team, developing an idea on a given topic, critical analysis, presenting negative sides and advantages. This method can generate ideas in the widest range from the idea to the product manufacturing method;
- •Observation method observation material is taken from real life (when observing human activity,

target object or environment);

- •Empathy method associating one's self with the object, seeing from the consumer's (target audience's) point of view what can be done to solve the problem (this is important for the designer, s/he must determine not only with artistic taste and intuition but also should be able to take into account the desire of a specific consumer or interest the target audience);
- •Bionic method combining the properties of living organisms and technical devices, making non-standard solutions for a separate component of the form or for the entire product. The bionic approach involves the analysis of natural systems, structure and form to determine principles of formation and function and then apply them to design.
- •Method of Neology direct use of other people's ideas or creation of a new form with own interpretation based on other people's ideas, with mandatory reference to prototypes;
- •Combinattorial methods the main methods of design projection use combination, among them combinatorics, transformation, kinetics, formation of dimensional product among them.
- Combinatorics the method of form creation in design is based on the search, study and use of variant changes of spatial, constructive, functional and graphic structuring, as well as on the means of projecting design objects, which are selected from typical elements;
- Method of transformation -redesign, defined by dynamics, changes in forms (change of one form to different forms, transformation of details, change of function);
- Kinetic method -the combinatorial method of designing, based on the idea of movement creation of dynamics of construction, décor, form has two approaches:
 - I. Creating the dynamics of transformable parts -the shape changes by adopting a complex construction (using innovative technologies and technical devices, the details of the object are brought into motion / rotating or moving elements, various technical and electronic means are used);
 - II. *Tactical Illusion (Op Art)* a drawing on an object that represents graphic elements and creates a simulation of space or movement;
- Advanced technology method it is used for objects that have the ability to change their visual appearance (with color, line, lighting, mainly using synthetic or organic material);
- •Inversion method -deliberate (targeted) change of product constituent elements, presentation in an unusual perspective, taking into account non-traditional approaches violates traditional design techniques and functional purpose;
- Analogy method creation of original design ideas, which is based on the use of certain properties of various objects: natural phenomena, flora / fauna, social phenomena, fine arts, architecture, music, literature, theater, circus, cinema, etc.
- •Method of focal objects a method of searching for new ideas and features, which is based on transferring the features of randomly selected other objects to the focal object. The object to be changed lies in the focus of the transfer of characteristics. The obtained result creates a chain of associations, a new design decision.
- •Morphological method breaks the object into small components, which are analyzed independently of each other, processed, as a result, the most important features are selected. These ideas are then structured and identified to develop different solutions. The purpose of the design should be

clearly defined.

4.2 Assessment Methods

Considering the educational programmes, the assessment methods determine the quality of the student's learning outcomes. Assessment methods can be used as an indicator of development dynamics - presentations, portfolio, exposure, exhibition/show, interview, essay, etc.

V. Additional Information

The evaluation system in educational programmes should be based on the principles of objectivity, reliability, measurability and transparency.

In order to train a fashion designer, it is necessary to strengthen the utilitarian competence of design education in addition to the creative one, which is possible only by increasing the experience of practical activities of project design. To organize such a form of education, it is appropriate to create a small-scale experimental enterprise based on a specific direction of the educational institution, where student activity will be directed to project activities, including orders from private and state organizations. A practice that has been tested in the international design education shows that this method is fruitful and viable.

5.1. Material Resources and Infrastructure

The higher education institution should provide a study area equipped with appropriate equipment, where it will be possible to create the necessary environment and conditions for learning and research. Also, the material-technical base within the framework of the HEI should provide the opportunity to achieve the learning outcomes defined by the present subject benchmark statement, taking into account the goals declared in the higher education programmes of design and the specificity of the field. The higher education institution should ensure the establishment of laboratory spaces and incubators focused on the development of creative industries;

- The HEI should provide access to the electronic scientific bases and the constantly updated book fund necessary for the implementation of the programme;
- The HEI -must constantly support the upgrade the qualifications of the academic and visiting personnel involved in the implementation of the programme in the direction of design;
- The HEI must provide proper computer resources and an online platform in case of need (force majeure) in order to support online teaching of bachelor's and master's programmes.

5.2. Internationalization of Educational Programmes in Design

In order to promote the internationalization of higher education programmes in design, it is necessary to:

integrate the Georgian higher education system with the international educational system; for this purpose, it is important to include local or international creative active professional leaders in the educational process - invited consultants and/or practitioners known in the local and international market, who will share new technologies and their own experience with students in the form of educational-creative projects and seminars;

In order to share mutual experience, representatives of the field should actively cooperate with successful foreign specialists in the field, industrial companies, sharing the best international experience.

It is important to encourage the mobility of local and foreign students by participating in international educational projects and programs;

It is necessary to stimulate the activity of students in the educational process, to develop the ability of self-learning and independent research.

5.3 Integration of Educational Programmes in Design

To integrate Georgian design-education into the international space, it is desirable to create an educational-creative hub for educational, creative and business projects based on partnership and mutual cooperation in cooperation with higher education institutions and State and/or private structures.

- With educational space:
- With State and private business;
- With creative workshops (fashion house, textile laboratory, design bureau, museum, etc.);
- With field practitioners;
- With theater and cinema artists;
- •With enterprises;
- •etc.

In this process, it is appropriate to actively interact with adjacent fields of visual culture and integrate with general humanities educational projects and programmes.

5.4 Academic Staff

The implementation of the bachelor's / master's degree programme in design is provided by the appropriate number of qualified academic / invited staff. Staff that implements the education programme in design must ensure that the programme is sustainable, efficient, and that students achieve their learning outcomes. Academic/visiting staff should be experimenters, develop and implement design methods, seek new forms of teaching and demonstrate contemporary understanding of world processes.

It is advisable to involve practicing designers/researchers in the practical disciplines of design education programs.

Activities of the personnel, involved in programme implementation;

It is recommended that the personnel involved in the implementation of design higher education programmes participate in the process of improving the teaching methodology, in the process of developing and modifying the subjects/modules, syllabi of educational programmes and promote students' independent research and self-development process.

The higher education institution, taking into account the internal regulation, determines the functions and duties of the academic and visiting personnel in accordance with the norms established by the legislation of Georgia.

It is desirable to share one's own experience about practical and/or research activities on local and international platforms; to participate in the development and introduction/implementation of the concept of educational reformation of the institution; to publish methodological manuals and monographs and/or publications in the field; organize and participate in research and exhibition projects; develop copyright programmes; initiate/participate in local and international education programmes and projects (training, workshops, master classes, seminars, etc.). etc.)

VI. Team Members Working on the Subject Benchmark Statements

N	Name, surname	Organization/institution	Position
1.	Nino Mgaloblishvili	LEPL Apolon Kutateladze Tbilisi State Academy of Arts	Doctor of cultural studies, professor at LEPL Tbilisi Apolon Kutateladze State Academy of Arts, Head of the direction of fashion design, Head of the quality assurance service at the Academy's faculty of design.
2.	Marine Maisuradze	LEPL- Georgian Technical University	Doctor of Architecture Head of the Department of Fundamentals and Theory of Architecture and Fine Arts Theory of LEPL- Georgian Technical University, Faculty of Architecture, Urbanism and Design
3.	Svetlana Mkhchiani	LEPL - Tbilisi Apolon Kutateladze State Academy of Arts	Assistant Professor at the Faculty of Design at LEPL Tbilisi Apolon Kutateladze State Academy of Arts Academy

4. 5.	Ketevan Vacheishvili Diana Talakvadze	LEPL Batumi Art State Teaching University LEPL Batumi Art State Teaching University,	Head of the bachelor's and master's programmes of design and clothing design of LEPL Batumi Art State Teaching University, head of the quality assurance service, professor. Associate Professor of the Department of Design
			at LEPL Batumi Art State Teaching University
6.	Irina Popiashvili	LTD Tbilisi Free University,	Dean of the School of Visual Arts Architecture and Design at LTD Tbilisi Free University
7.	Nino Kvrivishvili	LTD Tbilisi Free University,	Lecturer of the School of Visual Arts Architecture and Design at LTD Tbilisi Free University
8.	Tinatin Chigogidze	LEPL- Georgian Technical University	Professor at the Faculty of Architecture, Urban Planning and Design and Head of the department of Architecture, Urban Planning and Design at LEPL- Georgian Technical University
9.	Irine Saganelidze	Ministry of Culture, Sports and Youth of Georgia	Senior specialist of the first category of the Creative Process Promotion Department of the Ministry of Culture, Sports and Youth of Georgia
10.	Sophio Andghuladze	Georgian Clothing and Fashion Association "GAFA"	Chairman of Georgian Clothing and Fashion Association "GAFA", executive director of company "Elias Mosili"