

**The rules of
Planning, Elaboration, Evaluation and Development of the educational program
at the Georgian Technical University**

1. "Rule for planning, elaboration, evaluation and development of educational programs at the Technical University of Georgia" (hereinafter - the rule) has been developed on the bases of the Law of Georgia "On Higher Education", Order No. 3 of the Minister of Education and Science of Georgia "On Approval of the Rules for Calculation of Higher Education Programs with Credits" (dated January 5, 2007), Order No. 65/N of the Minister of Education and Science of Georgia "On the regulation of accreditation of educational programs of educational institutions and approval of fees" (dated May 4, 2011), Order No. 99/N of the Minister of Education and Science of Georgia "On the regulation of authorization of educational institutions and approval of fees" (dated October 1, 2010), Order No. 133 of the Minister of Education and Science of Georgia "On the approval of the charter of the Legal Entity of Public Law - Georgian Technical University" (dated September 9, 2013).
2. This rule defines the procedures for the elaboration, evaluation and development of academic higher education programs (hereinafter - the program) at the legal entity of public law - the Georgian Technical University (hereinafter - the University).
3. The educational program (curriculum) is a set of academic study courses/modules/concentrations necessary for obtaining a higher education qualification, which includes program goals, learning outcomes, academic study courses/modules with corresponding credits, student evaluation system and peculiarities of the organization of the educational process.
4. The process of planning, elaboration, evaluation and development of the program should be an open, transparent and collaborative process, in which all interested parties - academic and scientific staff of the relevant field, students, graduates, employers, professional associations and other parties (if any) should participate.

II. Planning of Educational program

1. The program must be consistent with the university's mission and based on stakeholder research analysis.
2. The basis of the program can be:
 - 2.1. Creation/increase of the demand for specialists of the relevant profile in the local and/or international market;
 - 2.2. Forecast information about the development of the economy, culture and social sphere, which determines the need for specialists with relevant knowledge, skills and competencies;
 - 2.3. Appropriate decision of the authorities in the field of higher education.
3. The basis for planning a joint educational program can also be an agreement with a higher educational institution/institution recognized in accordance with the legislation of Georgia

and/or a foreign country, as well as with an independent scientific-research unit on the implementation of a joint higher educational program.

4. The initiative proposal developed by the interested person/persons, which should include the name of the program, the level of education, the qualification to be awarded, the language of tuition, the purpose of the program and its connection with the mission of the university, should be discussed at the meeting of the relevant academic department.

5. In case of a positive decision, the initiative proposal and the protocol of the meeting of the academic department will be submitted to the dean of the faculty and the head of the quality assurance service. In case of approval, the dean ensures that the issue is discussed at the faculty council meeting.

6. The need for the participation of other academic department/departments may be identified during the discussion at the Faculty Council.

7. The faculty council, in case of a positive decision, establishes a group working on the program draft (hereinafter - the group) and appoints the group leader - the temporary head/heads of the program.

8. The group may include:

8.1. representatives of academic and visiting personnel of the relevant field;

8.2. curator/coordinator of educational programs of the faculty;

8.3. representative/representatives of the independent scientific-research unit of the relevant profile of the university;

8.4. student/students;

8.5. graduate/graduates;

8.6. both profile and other employer/employers (in the case of a justified proposal of the personnel involved in the drafting of the program);

8.7. representative of a professional organization (if any);

8.8. A representative of a non-governmental organization of the relevant profile (in case of existence);

8.9. representative of the manager's service and other persons.

9. The group should first conduct an analysis of the labor market:

9.1. To determine the potential fields of professional activity of the graduates of the educational program; to determine enterprises, institutions and organizations (hereinafter organizations) where the graduates will be able to work;

9.2. To collect information directly from employers about the existence of current and forecasted (for the next few years and in the future) demand for graduates;

9.3. Appropriate information and advice will be obtained from the professional association/associations (if any).

10. In case of obtaining reliable information by the group, the group starts developing the project of the program by the decision of the dean of the faculty and the head of the quality assurance service. In the process of work, the temporary head of the program receives consultations from the dean, the quality assurance service of the faculty, and the heads of academic departments.

II. Development of an educational program

1. Structure and content of the program

1. The program must meet the minimum requirements established by this document and it must specify:

- Requisites of the act of approval of the academic council of the program;
- Name of the university " Georgian Technical University " (in Georgian and English);
- Name of the program (in Georgian and English);
- Faculty name (in Georgian and English);
- Academic position, name and surname of the program leader/leaders;
- The qualifications to be awarded (in Georgian and English) and the volume of the program with credits;
- Language/languages of instruction;
- Prerequisite for admission to the program;
- Description of the program;
- The purpose of the program;
- Learning outcomes;
- Methods of achieving learning outcomes (teaching-learning);
- Student knowledge evaluation system;
- Field of employment;
- Possibility to continue studies;
- Human and material resources necessary for program implementation;
- Number of attached syllabi;
- Subject load of the program;
- Curriculum of the program.

2. The program should be signed by:

- Program leader/leaders;
- Head of Faculty Quality Assurance Service;
- Dean of the faculty;
- Head of Quality Assurance Service of GTU ("Agreed");
- Chairman of the faculty council.

3. The following should be submitted as attachments to the program:

- Learning outcomes of the program;
- Mapping of program objectives and learning outcomes.

4. The program should include:

- Academic study course programs (syllabi);
- Information about the human resources necessary for the implementation of the program (last name, first name, status (academic position/scientific position/visiting personnel, biographical data (CV);
- Information about the material resources necessary for the implementation of the program.

5. Qualifications to be awarded and the amount of the program credits

- The name of the program may not match the academic degree/qualification to be awarded;

- The title of the qualification to be awarded must comply with the requirements of the applicable legislation;
- The content, volume and complexity of the developed program should correspond to the level of education;
- The structure and content of the program must be in accordance with the qualification to be awarded. It should ensure the logical connection of all its constituent components and the achievement of the learning outcomes of the program by a student with average academic achievements within a reasonable period of time;
- The educational and scientific-research components included in the program (including each course) must be arranged in a consistent and logical manner; Prerequisites for admission to the next component must be adequate;
- The program must be built according to the rules established by Georgian legislation and in accordance with the European credit transfer system (ECTS);
- Determining the volume of the program component should be done taking into account its content, learning outcomes and the specificity of the field;
- The group must take into account that the credit is distributed among each component defined by the educational program and includes the contact and independent hours required for the learning outcomes achieved by the specific component. Credit cannot be calculated based on contact hours only; It should also be taken into account that the study component is one semester long.
- When calculating the credit, the time determined for the additional exam (preparation, passing, evaluation), as well as the consultation time with the person implementing the component of the educational program, should not be taken into account;
- In GTU, the educational component with the same content, volume and learning outcome for students of all programs should include an equal number of credits;
- The program should take into account the results of new research and modern achievements of the field;
- Bachelor's educational program should ensure optionality within the free components of the educational program;
- In the case of master's and doctoral educational programs, depending on the goals of the educational program, the university must ensure optionality within the free components.

6. Language/languages of instruction;

- The program can be implemented in Georgian or foreign language;
- The program can also be implemented in Georgian and any foreign language. In this case, the languages of instruction are indicated;
- Conducting the program only in a foreign language is allowed, if it is stipulated by an international agreement, or agreed with the Ministry of Education and Science of Georgia;
- It is allowed to offer a separate educational component of the program in a foreign language, to determine the possession of a foreign language as a prerequisite for its completion and to refer to the literature to be used in a foreign language;
- Foreign language program descriptions and syllabi are prepared in both Georgian and foreign languages;

- Preparation of program and syllabi in a foreign language is provided by the staff implementing the program.
- Editing of programs and syllabi prepared in a foreign language is provided by the university administration.

7. Prerequisite for admission to the program

- The prerequisite/prerequisites for admission to the program must take into account the specificity of the program, ensure the inclusion of persons with the necessary knowledge, skills and competence to study in the program;
- Prerequisites for admission to the program must be logically related to the content of the program, the learning outcomes and the qualification awarded;
- Prerequisites and procedures for admission to the program must comply with the applicable legislation;
- Prerequisites and procedures for admission to the program must be transparent, fair, public and accessible.

8. Description of the program

The program should reflect:

- basis for creating the program;
- number of credits, as well as years and semesters of education;
- Compliance of the learning outcomes with the generalized learning outcomes described in the national qualifications' framework;
- Information on the ratio of credits determined for the mandatory and optional academic study courses, including the components;
- Information on the purpose and scope of the practice and research component/components.

9. Objectives of the program

- should be clearly formulated, realistic and achievable;
- should reflect what knowledge, skills and competencies the program is aimed at graduate training;
- should reflect what the program contributes to the development of the field and society;
- should be consistent with the mission, goals and strategy of the university, faculty/school and/or academic department/departments;
- should take into account local labor market requirements and international market trends, as well as science/field, state and/or community development requirements;
- should be public and accessible;
- should be shared by the persons involved in the program;
- The objectives of the program should reflect the internationalization issues of the program, if any.

10. Learning outcomes

- When determining the learning outcomes of the program, the professional activity standards of the relevant field (if any) should be analyzed and those standards that are directly related to the future professional activity of the graduates of the new program should be distinguished;
- When developing competencies, the group should take advantage of the list of competencies given in the field and professional standards (if any) and, if necessary, define new competencies that the graduate will need to perform professional functions. In the absence of a standard list and/or the need to add new competencies, the maximum involvement of the potential employer or customer should be ensured. For this purpose, the group should use appropriate questionnaires;
- Learning outcomes of the program should
 - correspond to the objectives of the program, there should be a logical connection between them;
 - include the basic knowledge, skills and/or responsibility and autonomy provided for in the content;
 - Be measurable, achievable and realistic;
 - Should correspond to the relevant level of qualification and the qualification to be awarded;
 - Rely on the sectoral characteristics developed on the basis of the qualification's framework (if any);
 - To comply with the requirements of the fields of professional employment of graduates of the program and to provide the opportunity to continue studies at the next level of education;
- The group must map the learning outcomes, according to the form of the educational program of the relevant teaching level, approved by the GTU.

11. Methods of achievement of the learning outcomes (teaching-learning).

- The teaching-learning methods used in the educational program should take into account the specifics of the field and ensure the achievement of the learning outcomes of the program;
- The person implementing the training course must determine the methods (means) of knowledge transfer necessary for the student to achieve the learning results provided by the program, such as: lecture, working in a working group, practical work, laboratory classes, seminar, teaching with electronic resources, electronic teaching, etc., also, consulting and independent work. In addition, activities corresponding to teaching-learning methods are determined: discussion, debate, demonstration, presentation, group work, performance of a thematic project, performance of a course work/project, homework, etc.;
- Teaching-learning methods should be reflected in the curriculum (program) of academic study course - syllabus.

12. Student knowledge assessment system

- According to the legislation of Georgia, the assessment component/components, method/methods and criteria should be defined for each form of assessment within the framework of the assessment system.
- Evaluation forms, components, methods and relevant criteria are chosen by the author of the syllabus in accordance with the specifics of the teaching level and training course, as well as the used teaching-learning methods.

13. Field of employment

Large employment sites and networks of enterprises/institutions regardless of legal form should be listed.

14. The possibility of continuing education

It should be specified at which program of the level of the qualification, determined by the national qualifications' framework, the graduate can continue his studies.

15. Human and material resources necessary for program implementation

- The human (academic staff, visiting professors, teachers, support staff), methodical (manuals, auxiliary manuals, methodical guidelines, lecture courses, etc.), material-technical (buildings, auditoriums, offices, laboratories, etc.), availability of library, information and financial resources available at the faculty/university in terms of the possibility of implementation the program should be evaluated. If the resources are not enough - the perspective of program implementation by attracting other resources should be studied;
- Financial income of the program, depending on the forecasting contingent of students, should cover all current expanses (remuneration of labor of the personnel participating in the implementation of the program, utility expanses, materials, reagents, etc.) and charges; it shall also ensure the possibility of bearing capital expenses (e.g., procurement of lab equipment, computers and their software, operation, etc.), the possibility of financing research and making other expenses necessary for the development of the program;
- Evaluating program sustainability should identify strengths and identify areas for improvement.

16. Development of academic study course programs - syllabi:

- The main constituent part of the educational program – the curriculum (syllabus) of academic study course must be drawn up in the form and manner established by the Georgian Technical University;
- Filling in all fields, provided in the form, is necessary;
- The author of the syllabus has the right to determine the content of the syllabus independently, taking into account the specifics of the academic study course, to include in the syllabus additional information or brief explanations related to the content of each paragraph, as well as to independently determine teaching-learning methods and activities, evaluation components and methods, and other parameters;
- The syllabus preparation process is coordinated by: at the faculty level - dean's office, relevant academic department/departments, quality assurance service of the faculty; At the university level – University Quality Assurance Service, Department of Teaching.

IV. Approval of educational program

1. The draft of the program should be discussed and evaluated at the meeting/meetings of the academic department/departments, and then by the dean and the quality assurance service of the faculty. The draft of the agreed program should be submitted to employers and professional associations for review, as well as posted on the Faculty's website. Submitted proposals will be reviewed in the same order. It is desirable that the representatives of the employers were present at the mentioned discussions.
2. After evaluation and correction of the program project, it is submitted to the quality assurance service of the university for approval, together with the report card of the dean of the faculty.

The quality assurance service of the university verifies the compliance of the program project with the authorization and accreditation standards and submits a written conclusion to the dean of the faculty.

3. In case of comments, the dean of the faculty, the head of the quality assurance service, the temporary head of the program and other persons related to the preparation of the program, if necessary, together with the representatives of the quality assurance service of the university, discuss the comments given in the conclusion and make appropriate corrections in the draft program;
4. The dean of the program will present the agreed draft of the program at the meeting of the faculty council. In case of a positive decision of the faculty council, the dean will submit the signed program project to the quality assurance service of the university.
5. After being signed by the head of the quality assurance service of the university, the dean submits the appropriate report card, an extract from the protocol of the faculty council meeting and the draft program to the rector, who forwards it to the academic council for review and approval. The issue is presented by the dean at the meeting of the academic council; The review should be attended by the heads of the quality assurance services of the university and the faculty, the program temporary head/heads and persons invited by the Rector's decision.
6. The academic council reviews the program project and, in case of a positive decision, approves the program and the appoints program head/leaders, and also makes a decision on submitting the program to the LEPL National Center for Education Quality Enhancement for accreditation or authorization. It should be taken into account that the implementation of regulated educational programs for teacher training and training in the Georgian language, as well as doctoral educational programs, is possible only in case of passing accreditation.
7. The quality assurance service of the university records the program in the relevant register and ensures its submission to the LEPL National Center for Education Quality Enhancement for the purpose of accreditation or authorization in compliance with the requirements of the relevant regulations approved by the relevant order of the Minister of Education and Science of Georgia.
8. In case of a positive decision by the Accreditation or Authorization Council, the quality assurance service of the university will store the program in the current manner, and transfer its certified copies to the teaching department and the quality assurance service of the faculty, as well as ensure the inclusion of relevant data in the catalog of educational programs and its availability (including on the university's website) placement). The quality assurance service of the faculty also records the program in its own register and will keep it in the current manner, and will give its certified copy/copies to the dean's office (curator of educational programs), the head/leaders of the program and the relevant academic department/departments, as well as ensure its placement on the website of the faculty.

V. Status of Program Head

1. The head of the doctoral, master's and bachelor's educational program of the Georgian Technical University is the person responsible for the content and quality of the program, who:
 - Leads the processes of program elaboration and development.
 - Ensures compliance of the program with the national qualification framework.

- Ensures compliance of academic study courses (subjects) provided by the program with program objectives and outcomes.
 - Participates in the assessment of compatibility between the material and technical base (properly equipped teaching laboratories, lecture halls, textbooks, etc.) and the program (or any of its components).
 - Cooperates with employers, enterprises, professional associations and other interested parties in order to develop the program in accordance with field requirements.
2. A person cannot be the leader of more than one curriculum of higher educational level (with exception of similar curricula, elaborated for different languages of teaching). Leadership of curriculum is considered as the component of methodical work.
 3. The head of the program, as a rule, can be a University professor with appropriate qualification.
 4. The program and its head should be approved by Academic Council of the University, in conformity with the existing procedure.
 5. The head of the program is accountable to the Faculty Council and the Academic Council.
 6. In case of identification of a serious shortcoming in the program, which led to a negative external evaluation and/or rejection by the Accreditation/Authorization Council, the issue of administrative responsibility of the program head will be considered.

VI. Evaluation and Development Educational Program

1. In order to evaluate and develop the educational program, based on the order of the rector and the submission of the head of the quality assurance service of the university, a commission (hereinafter - the commission) is established at each faculty. The chairman of the commission is the head of the quality assurance service of the faculty.
2. The commission verifies the compliance of the laboratory equipment, relevant literature, human resources implementing the program, auditoriums and other parameters of the program with the requirements of authorization and accreditation, as well as the progress of the implementation process of the educational and research components of the program provided by the educational program and training course programs.
3. The commission is authorized to request information and documents necessary for the implementation of its functions from the heads of the academic departments and programs of the faculty.
4. In the process of monitoring the implementation of the program, special attention shall be focused on ensuring that the program achieves the set goals and anticipated learning outcomes.
5. The evaluation criteria of the educational program are:
 - Results of the survey of the program leader/leaders;
 - Results of students' attendance-activity monitoring;
 - Results of monitoring students' academic performance;
 - Rate of seeding from the program and completion of the program;
 - The rate of employment of program graduates and their survey results;
 - Employer survey results;
 - Results of students' survey;
 - Results of the survey of professors and teachers involved in the program;
 - Results of the evaluation conducted by external evaluators (if applies);

- Evaluation results (if applies) made by other stakeholders (e.g., professional association).
6. Based on the results of the evaluation of the educational program, the commission will develop recommendations to improve the program or its component(s). Also, the activities and persons responsible for the implementation of the recommendations are determined.
 7. The basis for modification of the program may be the following:
 - Results of program evaluation;
 - Change in requirements for graduates of the program;
 - Need to change the title of the program;
 - Changes made in the legislation;
 - Need of change of assessment system of students' knowledge;
 - Need of change the credits of the main components of the program;
 - Change of resources needed for program development;
 - Changes in the contents of academic study course programs - syllabi.
 8. The stages for Program modification may be the following:
 - Clarification of the requirements for graduates of the educational program;
 - Adjustment/clarification of qualifications to be awarded;
 - Adjustment/clarification of learning outcomes of the program;
 - Adjustment/specification of the volume of the main components of the program;
 - Correction/clarification of teaching-learning methods;
 - Adjustment/clarification of the students' knowledge assessment system;
 - Specification of the availability of resources necessary for the implementation and development of the program;
 - Forecasting the sustainability of the program;
 - Introduction of change in academic study course programs - syllabi;
 - Development of the draft of the modified program;
 - Review and evaluation of the revised program project at the faculty level;
 - Review and approval of the revised program project at the university level;
 - If the program is modified, reflect the changes in the self-assessment questionnaire;
 - In case of significant change in the program, its submission to LEPL – National Center for Enhancement of Education Quality for the purpose of accreditation or authorization.
 9. Individual procedures at program modification stages may be similar to approval of a new program.
 10. Information about modification should be immediately reflected in the catalog of educational programs and placed on the website.
 11. The grounds for cancellation of the program may be the following:
 - Results program evaluation;
 - Amendments to the legislation;
 - Absence or sharp reduction in demand for graduates of the program;
 - Low number of registered prospective students and enrolled students for the program;
 - Reduction of the resources needed for program implementation;
 - Non-sustainability of the program;
 - Other circumstances, justified by the commission by means of unbiased data.

12. The stages of cancellation of the program can be the following:
 - Specification of the demand for graduates of the program;
 - Analysis of the indicators of registration of entrants to the program and enrollment of students;
 - Specification of the existence of resources necessary for the implementation of the program;
 - Forecast of the sustainability of the program;
 - Results of survey of employers, graduates, students, academic staff, other interested persons;
 - Results of consultation with the professional association.
13. In case of modification/cancellation of the program, the university must take into account the legitimate interests of the students and give the student the opportunity for unimpeded completion of the program.
14. In case of modification of the program, the university should inform the students about the changes made in the program, as well as about the compatibility of the credits they have passed with the modified program and the specially developed individual curriculum. The students have to be provided with explanations about the curricula of partner universities, rules, procedures and terms of mobility.