საქართველოს ტექნიკური უნივერსიტეტი
GEORGIAN TECHNICAL UNIVERSITY

Bachelor's Educational Program

Program Title

საtur saქმე
Forestry

Faculty

აგრარული მეცნიერებების და ბიოსისტემების ინჟინერინგის ფაკულტეტი
Faculty of Agricultural Sciences and Biosystems Engineering

Program Head/Heads

Professor Giorgi GAGOSHIDZE

Qualification to be Awarded and the Extent of the Program in terms of Credits

Bachelor of the Forestry
Will be awarded by combining at least 210 credits of the education program's primary specialty and no more than 30 credits of free components if 240 credits are completed.

Language of Teaching

Georgian

Prerequisite for Admission to the Program

Only the holder of a state certificate proving complete general education, or an equivalent person enrolled in accordance with the procedure established by Georgia law, shall have the right to study at the Bachelor's Educational Program.

Program Description

The program is based on the ECTS system; 1 credit is equal to 25 hours, which includes both contact and independent work hours. The distribution of credits is presented in the program curriculum.

One semester includes 20 weeks, of which the learning process takes place over a period of 15 weeks. The rector of the GTU issues an academic calendar before the beginning of the semester, which is published on the website.

The duration of the program is 4 years (8 semesters). Bachelor's qualification will be awarded by combining a primary specialty (at least 210 credits) and free components (at least 30 credits) if at least 240 credits are completed.

The primary specialty of the education program (210 credits) includes the following components:

a) Foreign language - 10 credits. At the beginning of the study the student has the right to choose one of four foreign languages (English, Russian, German, French) and accumulate 5-5 credits during the first two semesters;

b) Elective course in humanitarian sciences - 3 credits (Introduction to Philosophy, History of Georgia, Sociology, Political Science, Applied Psychology, Academic Writing, Culture and Modernity);

c) Compulsory education courses in the specialty - 168 credits;

d) Compulsory elective courses in the specialty - the student chooses a certain number of courses from them, the total volume of which is at least 30 credits.

After mastering the main specialty, the student chooses a certain number of courses from the free components (free elective education courses), the total amount of which is at least 30 credits.

The first semester includes five compulsory education courses in the specialty, foreign language - 5 credits, for a total of 27 credits.

The second semester includes six compulsory education courses in the specialty, foreign language for 5 credits, and an elective education course in humanitarian sciences for 3 credits, for a total of 34 credits.

The third semester includes six compulsory education courses in the specialty for a total of 30 credits;

The fourth semester includes six compulsory education courses in the specialty for a total of 30 credits;

The fifth semester includes six compulsory education courses in the specialty for a total of 29 credits;

The sixth semester includes three compulsory education courses in the specialty and field practice for a total of 31 credits;

The seventh semester includes compulsory elective education courses in the specialty for a total of 25 subjects. Of these, the student chooses the required number of courses.

The eighth semester includes free components (free elective education courses), from which the student chooses the required number of courses.

Detailed information about the learning process is provided in the Instructions for Managing the Educational Process at Georgian Technical University at the following electronic address.

Program Objective

The objective of the program is to prepare a forestry graduate who will be able to work and develop a career in the field of protection and optimization of forest biodiversity, based on the experience gained on an understanding of the maintenance and reproduction of forest ecosystems, natural regeneration of major forest forming species in groves, species exchange and management of other important life processes and through participation in their management; to teach the student the practical experience necessary to implement effective forest managing measures in both natural and cultural ecosystems, as well as to maintain and improve soil-protecting, climate-regulating, reservoir, resort-balneological and other beneficial functions of the forest.

Learning Outcomes/Competences (general and sectoral)

Knowledge and understanding - the student will acquire knowledge about conservation and optimization of Georgian forests and their biodiversity; he/she will understand the peculiarities of monitoring eroded areas on state and protected forest lands and carrying out preventive forest melioration measures.

Ability to apply knowledge in practice - the student will be able to monitor the phytosanitary condition of forests and implement preventive measures. He/she will be able to provide the organization with the solution of the problem of correct forest management during the inspection period based on the analysis of the results obtained during the correct accounting and inventory of forests and general forest planting works. Ability to participate in planning of forest clearance works and pyrological measures.

Ability to make conclusions - to assess the unsatisfactory process of natural forest regeneration and draw conclusions. Against the background of global climate change, to understand the necessary measures to preserve natural forest ecosystems intact and develop appropriate conclusions to protect forest biodiversity through the provision of forest legal framework.

Communication skills - the student will acquire the ability to fully and consistently convey forestry information in native and foreign languages (English, Russian, French, German); Ability to share your opinion with specialists and non-specialists in the field Based on the analysis of current processes in the forestry and agricultural sector; Ability to prepare presentations or written information on forestry;

Ability to learn - the student will be able to determine the direction of learning based on the environment and priorities created; Assess the need to update forestry knowledge. Ability to assimilate the latest information in forestry and receive continuing education.

Values - Understanding of forestry principles, values and existing importance. Participation in the process of forming new forestry values, their realization and affirmation.

Methods of Achieving Learning Outcomes (teaching-learning)

☒ Lecture ☒ Seminar (group work) ☒ Practical ☒ Laboratory ☒ Practice

☒ Course work/Project ☒ Independent work ☒ Consultation

In the learning process, depending on the specifics of a particular study course program, the following activities of the teaching-learning methods are used, which are outlined in the relevant study course programs (syllabi):

Verbal or oral. This activity includes storytelling, conversation, etc. During the process, the teacher conveys and explains the learning material through words, and students actively perceive and internalize it by listening, memorizing and understanding.

Explanation – is based on reasoning on the given issue. In the process of explaining the material, the teacher provides specific examples, which are analyzed in detail within the framework of the given topic.

Discussion/debate – A discussion process greatly increases the quality of students' involvement and their activity. A discussion may turn into an argument and this process is not merely confined to the questions posed by the teacher. This method develops students' skills in reasoning and substantiating their own ideas.

Synthesis - involves grouping separate issues into a whole. This method helps to develop the ability to see the problem as a whole.

Writing work - implies the following forms of activity: copying, taking notes, making a synopsis of the material, composing theses, writing an abstract or essay, etc.

Collaborative work - using this method implies dividing students into separate groups and giving each group its own task. The group members work at their issues individually and at the same time share their opinions with the rest of the group. According to the problem raised, it is possible to shift the functions among the group members in this process. This strategy ensures the students' maximum involvement in the learning process.

Demonstration - this method implies a visual presentation of information. It is quite effective in terms of achieving results. In many cases, it is better to present the material to students in both audio and visual form simultaneously. The material being studied can be demonstrated by both the teacher and the student. This method helps to make visible the different stages of understanding the learning material, to clarify what students will have to do independently; At the same time, this strategy visualizes the essence of the issue/problem. The demonstration can take a simple form.

Analysis - helps to break down the learning material as a whole into its component parts. This facilitates detailed coverage of individual issues within a complex problem.

Deductive method - determines the form of transferring any knowledge, which is a logical process of discovering new knowledge based on general knowledge, i.e., the process goes from the general to the specific.

Activity-based learning - requires the active involvement of the teacher and the student in the learning process, where the practical interpretation of theoretical material is especially important.

Brain storming – This method involves facilitating the formation and expression of as many, preferably radically different, opinions and ideas on a particular issue/problem within the theme as possible. The mentioned method stipulates the development of a creative approach to the problem. The use of the method is effective when there are large groups of students.

Case Study - the teacher discusses with students the specific cases and they will explore the issue comprehensively and thoroughly.

Cooperative learning - this is a teaching strategy in which each group member is required not only to learn independently, but also to help his teammate learn the subject better. Each group member works on a problem until everyone has mastered it.

Student's Knowledge Assessment System

The student's knowledge is assessed on a 100-point scale.

Positive grades are:
- (A)-Excellent - 91-100 points;
- (B)-Very Good – 81-90 points;
- (C)-Good – 71-80 points;
- (D)-Satisfactory – 61-70 points;
- (E)-Sufficient – 51-60 points.

Negative grades are:
- (FX) - Failed to pass – 41-50 points, which means that the student needs more work to pass and is allowed to take an additional exam once with independent work;
- (F) - Failed - 40 points or less, which means that the work done by the student is insufficient and he/she will have to study the subject again.

Fields of employment

- Ministry of Environmental Protection and Agriculture of Georgia:
- National forestry, protected areas, environmental monitoring bodies, forest policy and biodiversity department, relevant regional and district structures;
- Research Center staff and structural units;
- Ecological and landscaping services of Tbilisi City Hall and municipalities of other cities;
- Educational and scientific institutions of relevant profile;
- National and regional botanical gardens;
- State and private nurseries;
- Relevant specialized agencies of the Ministry of Energy of Georgia and Georgian Railways;
- State and private hunting farms.

Opportunities for continuing education

Master's degree educational programs

Human and material resources needed to implement the program

The program is provided with adequate human and material resources. For additional information, please find the attached documentation

Number of attached syllabi: 81