საქართველოს ტექნიკური უნივერსიტეტი
GEORGIAN TECHNICAL UNIVERSITY

Approved by
Resolution № 733 of the Academic Council of GTU dated July 6, 2012
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Resolution № 01-05-04/20 of the Academic Council of GTU dated March 10, 2022

Master's Educational Program

Program Title

სატყეო საქმე
Forestry

Faculty

აგრარული მეცნიერებების და ბიოსისტემების ინჟინერინგი
Agricultural Science and Biosystems Engineering

Program Head/Heads

Professor Giorgi GAGOSHIDZE
Associate Professor Nino LOMIDZE

Qualification to be Awarded

Master of Forestry

Will be awarded upon completion of at least 120 credits of the educational program

Language of Teaching

Georgian

Prerequisite for Admission to the Program

A person with a minimum of (01) Bachelor of Agricultural Sciences, (05) Bachelor of Science/Natural Sciences or equivalent academic degree who is enrolled through Master's examinations (General Master's Examination and examination/s as determined by the GTU) is eligible to study in the Master's program.

Examination questions/tests will be posted on the GTU Training Department website at least one month prior to the examinations. Admission to the program without passing Master's exams is possible according to the rules established by the Ministry of Education and Science of Georgia.

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. The program lasts 2 years (4 semesters) and includes 120 credits (ECTS). 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 distribution of 120 credits in the Master's educational program "Forestry" is presented as follows: 45 credits are allocated for compulsory courses and 30 credits for elective courses. 45 credits are allocated for the research component.

Research component:

It involves research work aimed at developing the master's student's ability to make independent theoretical and practical reasoning and conclusions.

Program Objective

The objective of the program is to prepare a master who can sustainably manage forests, maintain, protect and restore forest ecosystems - to preserve and improve climatic, water-regulating, protective, cultural, medicinal and other beneficial natural properties. Rational utilization of wood and non-wood resources. Accounting and - assessment of the forest fund in natural forests and cultural cenoses. Processing for the audit period in the perspective of the forest inventory project using modern methods in the field of forestry. Systematic monitoring of forest resource dynamics and, taking into account existing changes, planning and implementation of effective forestry measures that will allow the graduate to conduct his/her activities in accordance with the requirements of the market economy.

Learning Outcomes/Competences (general and sectoral)

Knowledge and understanding - has deep and systematic knowledge in the field of forestry, understands the principles of sustainable forest management, care, protection and restoration of forest ecosystems to maintain and improve climatic, water-regulating, protective, cultural, medicinal and other useful natural properties. Has in-depth knowledge in the field of accounting and assessment of the forest fund, rational use of wood and non-wood resources, development of the forest management project for the perspective period, restoration and reforestation and ways of solving problems in this field.

Ability to apply knowledge in practice - can independently carry out: maintenance, protection and restoration of forest ecosystems to preserve and improve climatic, water-regulating, protective, cultural, medicinal and other useful natural properties; rational use of wood and non-timber resources; accounting and assessment of the forest fund; systematic control over the dynamics of forest resources and planning and implementation of effective forestry measures taking into account the ongoing changes. Able to independently conduct forest research using modern methods and approaches.

Ability to make conclusions – will be able to formulate valid conclusions and determine the relationship between them, considering contemporary, practical needs, based on an awareness of clearly defined problems, taking into account and analyzing the results obtained as a result of research.

Communication skills - able to communicate with the academic community on important issues in the field of forestry, both in Georgian and foreign languages, as well as able to understand and process information obtained during communication; Preparation of written reports and presentations of conducted research using information and communication technologies; fruitful cooperation with the interested public on the basis of acquired knowledge, their qualitative advice.

Ability to learn - able to understand current forestry issues, obtain the latest relevant information, printed or other materials, and independently conduct research based on that information to ensure continuous professional development and adapt to a changing environment.

Values - has high standards of professional cooperation. Able to raise and independently resolve issues in the fields of forestry, evaluate and contribute to existing industry values.

Methods of achieving learning outcomes (teaching-learning)

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

☐ Course work/Project ☒ Master's Thesis ☒ Consultation ☒ Independent work

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): discussion/debate, collaborative work, case study, demonstration, induction, laboratory work, analysis, problem-based learning (PBL), brain storming, synthesis, writing work, deduction, role-playing and situational games, oral or verbal work, explanation, practical work, cooperative learning, action-oriented learning, project development and presentation.

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.

Research component: completion and defense of the Master's Thesis - a person who has completed all the educational components provided by the educational program will be allowed to defend the Master's Thesis.

The completed qualifying thesis is the result of the independent research work of the Master's student. Submission, public defense and **assessment of the completed qualification work are carried out once, the assessment is done with 100 points.**

Fields of employment

A graduate of the Master's Degree in Forestry may find employment with: Ministry of Environment Protection and Agriculture of Georgia; Forestry Agency and its subordinate forest areas; Agency of Protected Areas; state reserves; national parks; National Environmental Agency; biodiversity service; public and private nurseries; railroad, road and forest strip protection service; State structural units of agricultural land management; recreation and ecotourism agencies; city improvement and landscaping agencies; landscape planning design services.

Opportunities for continuing education

PhD 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: 34