Ilia State University

Faculty of Natural Sciences and Medicine

Master's Program **- Nature Protection and Forestry**

Curriculum

Name of the Faculty	**Faculty of Natural Sciences and Medicine**
Name of the Program	Nature Protection and Forestry
Academic Degree/Qualification to be Awarded	MSc. in Natural Resources
Duration of the Program (semester, number of credits)	4 semesters/120 ECTS credits
Program Development Date and the Issue of Updating	The program was developed in 2012, updated in 2019.
Language of Instruction	Georgian

Prerequisites (requirements) for Admission to the Program

Admission to the master's degree is based on the Unified Master's Examinations and the intra-university exam. The master's program is intended for graduates with a bachelor's degree (or equivalent) in the following fields: Biology, Forestry, Life Sciences, Earth Sciences, Ecology, Environmental Science, Agricultural Sciences, Economics, Social Science, Business and Administration. The intra-university examination tests the student's motivation as well as basic/general knowledge in the following areas: ecology, conservation biology, forestry sciences, life sciences and general environmental trends. In addition, the knowledge of the English language (level - B1) will be assessed within the framework of the exam. The exam is conducted in accordance with the current rules at Ilia State University.

Program Objectives

The objective of the program is to train specialists who:

1. will be able to conduct independent research, using modern methods and analytical skills, in order to study current problems in the fields of natural resources (forests, soils, wildlife and protected areas);

2. will be able to make effective decisions based on research results in order to ensure the sustainable use of natural resources (forests, soils, wildlife and protected areas) in the professional sector;

3. realize the importance of their own professional development and conduct their activities in compliance with the norms of professional ethics.

Learning Outcomes and Competencies

The graduate:

1. has deep knowledge of environmental protection and environmental governance, nature conservation and natural resources (forests, soils, wildlife and protected areas), which he/she uses to study problems and challenges in the management of species and biological resources by using modern approaches of fundamental and applied science;

2. can make effective decisions for the purpose of using natural resources (forests, soils, wildlife and protected areas) in accordance with the principles of sustainable development based on the results of the research;

3. uses sustainable development instruments in the management of natural resources (forests, soils, wildlife and protected areas); can distinguish between different modes of their management and assess the impact of these modes on ecosystems;

4. analyzes key threats to biodiversity, assesses the impact caused by human activities and determines ways to avoid, mitigate, and compensate for potential damage;

5. explains the regularities of functioning of ecosystems and analyzes the impact of different land use regimes on them, both in local and regional contexts;

6. acts effectively as a team member, adheres to the principles of professional ethics;

7. ensures effective and professional communication with colleagues and other interested parties, including representatives of the private sector, scientific, political and public organizations;

8. can identify further learning needs in order to master new knowledge in a purposeful, structured and effective way.

Teaching Methods

Lecture, seminar

Practical work

Problem based teaching

Individual and group projects

Method of analysis and synthesis

Supervision

Note: The syllabus for each component of the program specifies the relevant teaching methods.

Structure of the Master's Program

The master's program comprises 120 ECTS credits, within which the student must take general compulsory courses, general elective courses and compulsory courses for one of the following blocks: 1) Nature Conservation 2) Forestry 3) Nature Protection and Sustainable Development. In the last semester of studies, the student must complete and defend a master's thesis.

Distribution of credits:

- Main block – 60 credits

- One of the elctive blocks – 30 credits

- Master's thesis – 30 credits

Necessary auxiliary conditions/resources for learning

The library of Ilia State University, lecture rooms/halls, illustration tools, research laboratories and field research bases located in different regions of Georgia.

The program is implemented on the bases of the Institute of Ecology, Institute of Zoology, and Institute of Botany of Ilia State University, also, the partners of the program are the Geographic Information System (GIS) laboratories and the LEPL Agency of Protected Areas.

The program is also supported by various local and international organizations (e.g., the German Agency for International Cooperation (GIZ), the German Academic Exchange Service (DAAD), the World Wide Fund for Nature (WWF), the LEPL National Forestry Agency). In addition, students and lecturers can use the electronic selection system – "Argus", Turnitin, Moodle in the learning/teaching process.

Areas of Employment

Graduates of the program may be employed in the public sector (Ministry of Environmental Protection and Agriculture of Georgia, LEPL National Forestry Agency of Georgia, LEPL Agency of Protected Areas of Georgia, National Wildlife Agency of Georgia, etc.), as well as at universities, research institutes, and non-governmental sector in the following areas: research projects, data analysis and consulting, project planning and implementation - environmental, wildlife conservation and forest management.

As for the private sector, graduates of our program can be employed at: international/local companies, consulting firms, game farms, international donor organizations and in various programs and projects. Graduates will also be

able to work in institutes, laboratories and companies in the agricultural sector.

Graduates of the program will be able to continue their studies at the next level.

Grading System

The assessment is based on a 100-point system. Points will be distributed and defined as follows:
(A) 91 - 100 Excellent
(B) 81 – 90 Very Good
(C) 71 – 80 Good
(D) 61 – 70 Satisfactory
(E) 51 – 60 Sufficient
(FX) 41 – 50 Did not pass, which means that the student is required to work more to pass and is allowed to retake the exam once through independent work
(F) 0 – 40 Fail, which means that the work done by the student is not enough and he/she has to retake the course

Assessment components, criteria and assessment methods are presented in the syllabi of the training courses.