New Bachelor

In “FORESTRY”

Bachelor’s Program “Forestry”

The Bachelor program in "Forestry" combines the scientific, practical and creative aspects of forest sciences in the function of good governance of forest and pasture ecosystems as well as their use in accordance with the objectives defined in the management plan.

The curriculum provides students with the technical skills and knowledge necessary for the sustainable management of forest and pasture natural resources.

Students will receive knowledge about the updated assessment of the condition of forests and pastures, as well as about new methods of management and sustainable use of natural resources. They will also be able to master the principles of spatial planning for the multifunctional use of forest and pasture resources.

The program includes both theoretical courses and practical projects, allowing students to work with forest stands and pastures to implement applied projects. Graduates are prepared to develop their careers in the management and use of the forest and rangeland environment. The interdisciplinary nature of the program promotes innovation, solving technical and organizational problems, giving importance to the use of new work techniques that are completely friendly to the environment.

Program Objectives

This program aims to:

- Develop technical expertise in assessing natural forest and pasture ecosystems and nature protection: To equip students with in-depth knowledge of forest stand assessment methods, implementation technology, and modern harvesting techniques for wood and non-wood forest products.

- Encourage creativity and innovation in determining the main and auxiliary functions of forest and pasture ecosystems: To provide skills to determine the functions of forest and pasture ecosystems as effectively as possible in full compliance with the strategic objectives of regional and national development.

- Promote sustainable practices in forest and pasture management: To encourage the selection and use of management methods by the requirements of forest and pasture ecosystems, as well as the environment as a whole. Also, to support students' assessment of the services and products from natural forest and grassland ecosystems.

• Creating problem-solving and project management skills: To prepare students to manage production and development projects, from conception to implementation, ensuring effective planning, budgeting, and coordination with stakeholders.

• Cultivating interdisciplinary cooperation: To develop students' interdisciplinary skills, combining the technical aspects of development with the economic and social ones. Thus, students have the opportunity to collaborate in areas such as landscape management, marketing, environmental protection, etc

Core Competencies

Graduates will gain expertise in:

- Accurate assessment of forest stands from a silvicultural, and economic point of view.
- Sustainable management of forests and pastures.
- Choosing a better form of forest stand governance.
- Successful implementation of various projects in forests and pastures.
- Valuing services and products from forest and pasture ecosystems

Employment and career opportunities

- National Forest Agency
- National Agency for Protected Areas
- Municipal Forest Service
- Private companies and NGOs
- Various rural development agencies

Curriculum Structure

The three-year program combines natural sciences, technical sciences, and economic-social sciences:

• First Year: Basic modules in botanical physics and ecology, politics and law, basic knowledge in stationary conditions, statistics and artificial intelligence, erosion control and soil sciences, basics of economics, etc. (60 ECTS).

• Second Year: Advanced training in engineering subjects 1, forest management, wildlife and forest protection, forest ecology, silviculture, forest phytopathology and entomology, forest production, Basics of interior design, Markets and marketing of wood products, etc. (60 ECTS).

• Third Year: Two specializations in “Forest Ecosystem Management” and “Nature and Biodiversity Protection” (60 ECTS).

Interdisciplinary Approach

By international standards (Muster Curricula), the program balances:

- Natural Sciences (45 ECTS): Forest Botany, Dendrology, Applied Physics, Statistics, etc.
- Technological and Engineering Sciences (44 ECTS):Forest Engineering 1, Forest Engineering 2, Silviculture, Forest Breeding, Wood Technology, GIS and Remote Sensing Applications, etc.
- Social Sciences – Economic and Legal (45 ECTS): Business Administration, Basics of Economics, Basics of Politics and Law, Market and Marketing, etc

Why Choose This Program?

This degree combines technical, professional, and creative skills, preparing students for sustainable forest and rangeland management. Through practical experience, students improve their skills in assessing and governing natural resources by the principles of sustainability, thus opening up various career paths as evaluators, managers, designers, and implementers of projects. This program is best for those who seek to work for the protection and development of forest ecosystems, their biodiversity, and the environment as a whole. The scientifically correct implementation of projects through innovative technologies will help improve the quality of life.

LIST OF OBLIGATORY MODULES

As part of the degree program, compulsory modules amounting to a total of 138 ECTS credits must be completed.

STUDY CURRICULUM

Year 1 - Semester 1

No.	Obligatory Modules	ECTS
1	Basics of botany and ecology	6
2	Site conditions basics	6
3	Basics of politics and law	6
4	Forest statistics and data-driven AI	6
5	Basics of Economics	6
	TOTAL	30

Year 1 - Semester 2

No.	**Obligatory Modules**	**ECTS**
1	Forest botany	6
2	Wood industry	6
3	Torrent and erosion control and Geomatics practical course	6
4	Forest soil science and forest nutrition	6
5	Fundamentals of Geomatics (Surveying, Remote Sensing and Geoinformatics)	6
	TOTAL	**30**

Year 2 – Semester 1

No.	Obligatory Modules	ECTS
1	Forest Management I	6
2	Forest business administration and accounting	6
3	Forest Ecology	6
4	Wildlife ecology and forest protection	6
5	Forest management planning	6
	TOTAL	30

Year 2 – Semester 2

No.	Obligatory Modules	ECTS
1	Forest Engineering I	6
2	Forest Management II	6
3	Forest Entomology and Forest Pathology	6
4	Site and yield theory	6
5	Forest policy and forest law	6
	TOTAL	**30**

Year 3 - Semester 1

PROFILE 1: FOREST ECOSYSTEM MANAGEMENT

No.	Obligatory Modules	ECTS
1	Grazing areas management	6
2	Management of forest enterprises	6
3	Forest Engineering II	6
4	Elective Module I	6
5	Elective Module II	6
	TOTAL	30

Year 3 - Semester 2

No.	Obligatory Modules	ECTS
1	Elective Module III	6
2	Elective Module IV	6
3	Professional Practice	6
4	Diploma Thesis	12
	TOTAL	**30**

List of Elective Modules (Profile 1)

No.	Module	ECTS
1	Interdisciplinary project study with excursions	6
2	Public relations and small scale forest management	6
3	Market strategies and bioeconomy	6
4	Mathematic	6

5	Foreign language	6
6	Analysis of protective forests	6
7	Protected areas and aspects of sustainable use and nature conservation	6
8	Forest ecosystems: Ecosystem services and role in climate change	6

Year 3 - Semester 1

PROFILE II- NATURE PROTECTION AND BIODIVERSITY

No.	Module të detyrueshme	ECTS
1	Identification of native mammals and birds	6
2	Water systems - planning and ecological aspects	6
3	Spatial planning and agriculture	6
4	Elective Module I	6
5	Elective Module II	6
	TOTAL	30

Year 3 - Semester 2

No.	**Obligatory Modules**	**ECTS**
1	Elective Module III	6
2	Elective Module IV	6
3	Professional Practice	6
4	Diploma Thesis	12
	TOTAL	**30**

List of Elective Modules (Profile 2)

Nr	**Moduli**	**ETCS**
1	Protected areas and aspects of sustainable land use and nature conservation	6

2	Genetic and organismic biodiversity in forest ecosystems	6
3	Interdisciplinary project study with excursions	6
4	Forest ecosystems: ecosystem services and role in climate change	6
5	Foreign language	6
6	Protective forest analysis	6
7	Mathematics	6
8	Natural tourism development	6

LIST OF ELECTIVE MODULES WITHOUT SPECIALIZATION

No.	Module	ETCS
1	Foreign language	6
2	Identification of native mammals and birds	6
3	Genetic and organismic biodiversity in forest ecosystems	6
4	Geomorphology – landscape and processes	
5	Protected areas and aspects of sustainable land use and nature conservation	6
6	Hydraulics and hydromechanics	6
7	Hydraulic engineering	6
8	Interdisciplinary project study with excursions	6
9	Management and monitoring of forest ecosystem services	6
10	Market strategies and bioeconomy	6
11	Mathematics	6
12	Mechanics and materials science	6
13	Public relations and small scale forest management	6
14	Water systems - planning and ecological aspects	6
15	Spatial planning and agriculture	6
16	Protective forest analysis	6

17	Forest ecosystems: ecosystem services and role in climate change	6
18	Grazing areas management	6
19	Management of Forest Enterprises	6
20	Forest Engineering II	6