

Approved

By decision № 02-01/04. 08.02.2019 of Academic Board of
Saint Tbel Abuseridze Teaching University of Patriarchate of Georgia
Chairperson of Academic Board;
Rector, Skhalta Archbishop Spiridon

Reviewed:

By board of Faculty of Law and Public Administration
Protocol № 02-04-06/01. 02.02.2019

Faculty of Law and
Public Administration
of St. Tbel Abuseridze Teaching
University of Patriarchate of Georgia

Bachelor Educational Program

Agrarian Sciences

Qualification to be granted:

Bachelor of Agrarian Sciences in Agro Technology

Bachelor of Agrarian Sciences in Plant Protection

Bachelor of Agrarian Sciences in Forestry

Program volume: 240 ECTS credits

The heads of program

Rezo Vasadze – Academic Doctor of Agriculture, Professor

Guram Chkhubadze – Academic Doctor of Biology

Nana Jabnidze – Academic Doctor of Agriculture, Professor

Khichauri 2019

Program Title	Agrarian Sciences
Name of qualification to be awarded	Bachelor of Agrarian Sciences in Agro Technology Bachelor of Agrarian Sciences in Plant Protection Bachelor of Agrarian Sciences in Forestry
Name of Faculty	Agrarian Sciences and Business Administration
The head(s) of program/coordinators	Rezo Vasadze – Academic Doctor of Agriculture, Professor Guram Chkhubadze – Academic Doctor of Biology Nana Jabnidze – Academic Doctor of Agriculture, Professor
Duration/volume of the program (semesters, number of credits)	Duration of the Bachelor’s program is four academic years (eight semesters) – 240 ECTS credits (6000hours) University courses – 35credits 1. Specialty major courses: 85 credits, including: 50 credits – special moduls (optional); a) Module 1 – Agrotechnology; b) Module 2 – Plant Protection; c) Module 3 - Forestry 10 credits – optional courses; 2. Additional (Minor) Training Courses: 60 credits. In particular, students of other specialties of bachelor's degree will be able to choose additional specialty courses: History, Georgian Philology.
Language of instrucion	Georgian
Prerequisite (requirements) for admission to the program	
<p>Undergraduate program student can become a person with full general education, who passes a preliminary registration at the Unified National Examination Center and submits the Unified National Exams. Existence of an equivalent document defined by an intergovernmental agreement is obligatory for foreign nationals.</p> <p>A person with full general education has the right to study the agronomic bachelor's educational program. The prerequisite for adoption of the program is the passing of the Unified National Exams, which grants the status of the student to the citizens of Georgia. The precondition for admission to foreign nationals program is determined according to the legislation.</p> <p>The prerequisites for admission to the program include the results of the Unified National Examinations, subject to the priorities of the university and their respective coefficients.</p> <p>Without the passing of Unified National Exams, the right to study shall be determined by the Law on Higher Education - Article 52. Paragraph 3. Namely:</p> <p>With the purpose of students facilitating and mobility to study at higher education institutions without passing Unified National Exams, within the timeframes established by the Ministry of Education and Science of Georgia are allowed:</p> <p>A) For foreign citizens and persons with no citizenship who have received full general or equivalent education in a foreign country; B) For Georgian citizens who receive full general or equivalent education in foreign countries and have learned the last 2 years of full general education in a foreign country; C) persons having studied (studying) and received credits in a higher education institution recognized in accordance with the legislation of this country in a foreign country.</p> <p>The mobility of the educational program is permissible after the completion of one academic year of study. Mobility can be made</p>	

twice a year by the Ministry of Education and Science within the timeframes established by the LEPL National Center for Educational Quality Enhancement and the rules established by the University.

Purpose of Bachelor program

The Purpose of Bachelor program- Taking into consideration the national interests of Georgia, agrarian policy of the country and the Tbel Abuserisdze State University of Georgia's Patriarchate, the Agrarian Science Bachelor's Program is oriented to prepare a Bachelor of Agronomic Sciences, which will have fundamental knowledge of the basis of general and sectoral competences. He/She will possess: biological characteristics of the agricultural crops and maintenance management; Methods of production of agricultural products; Rational use of land; Opportunities for the use of farming and plant protection products; Agrlomeracic methods of improving soil fertility; Peculiarities of the creation of agrobiological farms; Basic principles of its protection and reproduction, in case of the use of natural resources; peculiarities of forest cultures production; The physical-mechanical features of the wood and the vital processes in it, modernization of forests, forest cutting, forest restoration; Forest types, forest maturity forms, rules for carrying out forest work; The program envisages the study of foreign languages and information technologies at a higher rate, which will significantly help the specialist to communicate and work after graduation.

Learning Outcomes (Field Competences)

Knowledge and understanding

Has a wide range of knowledge:

- In the basics of agro technologies, plant protection and forestry, acknowledges the importance of the sector in the sustainable development of agriculture and environment.

Knows:

The value, place and role of the plant, structure, biology, systematics, the diversity of living organisms and their nature - the use for human useful purposes. Regulations of the life processes in the plant in connection with environmental conditions; Plant Heritage and Variability Processes, Methods for Selection and Output of New and Improved species;

The issues of rational use, maintenance and reproduction of natural resources;

Soil physical-chemical properties, soil-producing processes, use of technical means of soil processing, types of fertilizers and fertilization systems, their storage and use, soil fertility raising rules; Main types of erosion and protection measures from them.

Regulation of meteorological events and formation of climatic conditions. Reclamation methods and methods for improving natural conditions and further intensification of agriculture;

Agricultural techniques used in agricultural production, agrotechnic requirements for soil cultivation; Basic and surface treatment of soil; Sowing, planting, plant pests and draft protection, issues of technical means used in forestry.

Agricultural and forest plant pests - diseases and issues related to the fight against them.

Theoretical, legal and organizational issues of labor protection, the provision of safety conditions in agriculture, fire safety, industrial sanitation and primary aid for victims.

The graduate of the **agro technological** module knows the importance of tea, subtropical, technical, vines, vegetable and vegetable crops, their biological characteristics, maintenance means and methods; He/she owns cattle breeding, beekeeping, viticulture - winemaking, medicinal herbage, storage of agricultural products for processing technologies. Vegetable crops morpho-biological characteristics, their classification, reproduction of local and promising varieties, regulation of care, environmental factors affecting agriculture crops. Sealed ground types, arrangement of vegetable crops, cultivating vegetable crops, and harvesting modern technologies. Biological diversity, soil biological activity. Healthy food production, creation and preservation of rich environment.

	<p>The Plant Protection Module graduates know the morphology, system and bio-ecology of agricultural crops and forest plant pests (viruses, bacteria, fungus, insects, ticks, nematodes, weeds etc.); Symptoms of Plant Damage and Diseases, Bioecology of Weed Plants Spread in Agricultural Crops and Plants, Traditional and Modern Methods of Identification of Plant Pests; Time of the development and dissemination of pests, prediction methods of their number, Methods of propagation, storage and use of endomophage, acryphage and herbophage; Basics of agronomic toxicology, classification of pesticides, methods of plant protection from pests, diseases and weeds.</p> <p>The Forestry Module graduate knows systematic analysis and general regularities of local and introductory species of functional purpose of forests; The peculiarities of the cultivation of the main forest species, the cultivation of forest crops; Physical-mechanical properties of wood and regularity of the vital processes in the woods, Forestry and wood studies, groves, forest cutting, modern regulation of forest restoration; Forest Types, Forest maturity forms; The rules for carrying out forest works; Timber preparation and transportation issues.</p> <p>Acknowledges: Enhancement of yields of agricultural crops, importance of plant protection in the implementation of agrarian policies of the country and providing ecologically safe food products. The importance of reasonable management of forest resources in sustainable development of the environment.</p>
<p>Ability to apply knowledge in practice</p>	<p>Field competences Is able:</p> <p>Use of progressive technologies for cultivating cultural plants to get a rich and high quality crop; Establishing and conducting appropriate agrotechnic measures, planting of agricultural crops, production - multiplication by traditional and progressive methods, Selection of organic and mineral fertilizers in the soil is in accordance with the reaction (P^H). The use of fertilizer restoration rules and methods for fertilizers to select fertilizers for agricultural crops in order to improve soil fertility;</p> <p>Determining and analyzing the meteorological climatic conditions of the agro-climatic zone in the process of development of agricultural crops and harvesting forecast methods, determining the effectiveness of the factor on the environment and planning the ways and methods to prevent negative impacts in accordance with the predetermined instructions.</p> <p>The graduate of the agro technology module can produce the vegetative and generic multiplication of subtropical and technical plants, planning of the garden plot, preparation of planting material, maintenance of seedlings and measures to combat weeding in accordance with predetermined directions. Raising, planting, and carrying out seedlings in open ground and mini greenhouse; Planting and maintenance of vineyards in field conditions, engrafting fruit trees, planting, carrying out and caring saplings. High quality standard planting material in the polyethylene parks using tea plant method, soil processing, fertilization and preparation for planting the saplings. Use of modern technology for animal care and breeding. Creating, producing and maintaining healthy food products.</p> <p>Plant Protection Module graduate can identify the crop and plant pests, their spread - development forecasts and timely evaluate fully phytosanitary conditions for plant protection measures, defining the role of natural enemies of harmful organisms (useful insects, bugs and</p>

	<p>microorganisms) in agrocentinos to draw out ecologically safe methods of combating harmful organisms, proper selection of chemical protection means of less dangerous plants for humans and their rational use in the integrated conservation system of agricultural crops.</p> <p>Forestry module graduate can define ecological conditions of the agro-climatic zones and take into consideration the area of forest cultures according to zones; Practical implementation of the measures for major use of forest, relevant management in forest cutting, rational use of forest resources, forest protection and natural or artificial renewal of forests. Forest sorting, determination of tree age, determination of wood additions to cut and grown trees, identify the properties of the wood structure, its value, physical and mechanical properties. Receiving timber by different means of transportation, manufacturing and production of goods for the public consumption, chemical recycling of timber and waste. Theoretical knowledge of the discipline of chemistry, mathematics and information technologies can be used in the field of agriculture;</p>
Judgment skills	Can assess, analyze, obtain information and provide reasonable conclusions based on modern, approved methods of care, protection, processing and production of agricultural products in the agrarian field.
Communication skills	Has: Ability to provide written, schematic, electronic and graphic versions of ideas, react to the problems in agrarian issues, reasoning, debate skills, transfer the argumentation to the specialists and non-specialists.
Learning Skills	Is able: - Follow its qualifications, raise professionalism and self-development; - Acquire and study modern information, national and foreign experience according to the need; - Study of modern methods of scientific research in the field of agriculture.
Values	- Recognizes the importance of the development of agrarian sector as the priority direction of public farming; - Recognizing the importance of planting, breeding, and agricultural product processing as the field of agriculture in the country's agrarian policy.

Methods for achieving expected academic outcomes

Taking into account the objectives and outcomes of the program, the work is carried out using the following methods:

- 1. Discussion/debate** –One of the most common methods of interactive teaching. discussion process increases the quality of a student's involvement and activity. A discussion may be transformed into a debate. This process is not limited only to the questions given by a professor. The method develops in students the ability to argue and to justify own opinion.
- 2. Team/Collaborative method** - this method of teaching involves dividing students into groups and giving them a study task. Members of the group individually elaborate the issue and concurrently share it with other members of the group. Depending on the task determined, it is possible to distribute the functions among the members of the group in the work process. This strategy ensures all students' involvement in the learning process.
- 3. A written working method** - involves the following activities: making of extracts and recordings, making summary on a material, drafting theses, writing abstracts or essays, etc.
- 4. Problem-oriented teaching** - The learning method, which uses the problem of new knowledge and integration process as a

starting point.

5. Case study - The professor discusses particular cases during a lecture together with students who fundamentally study the issue

6. Demonstration method– this method implies the visual presentation of information. It is quite effective in terms of achieving the result. In most cases it is better audio and visual materials to be provided to the students simultaneously. The studied material can be demonstrated by a teacher as well as by a student. The method helps to visualize different levels of perception of learning material and to specify the work students will have to do independently; at the same time, the strategy visually demonstrates the essence of a question/problem. Demonstration may be a simple thing, such as introduction of the working principle of tools to study specific meteorological phenomena, defining experiments in nature (wind speed, air humidity, etc.). Collecting of harmful diseases in the nature and studying with the help of laboratory tools, sampling of soils, planting seedlings of various cultural plants in polyethylene parks, Mastering the engrafting techniques in nursery gardens, measurement of forest wood diameter, Seedlings of one-year crops in greenhouse, and their systematic observation and care; Compost production, determination of nitritous chemicals in water, etc.

7. Analysis and Synthesis Method: Analysis method helps to disseminate the study material into one component as part of it, thus simplifying the detailed coverage of individual issues within difficult problems;

The method of synthesis implies a reversible procedure, or a single composition of groups of individual issues. This method promotes the development of seeing the problem as a whole;

8. Action-oriented teaching requires intensive involvement of professors and students in the teaching process whereas practical interpretation of theoretical material is of special significance

9. Verbal, or oral method - Transfer of new material in oral form in a narrative form whereby different methods are used in the context of the content of the subject;

10. The method of working on the book - method is mainly used in the learning process. Students are willing to work on reproductive works or popular scientific articles for scientific conferences;

11. The heuristic method - based on a gradual solution to the problem posed before students. This task is carried out through the identifying facts in the study process and linkages between them independently.

A Student's knowledge evaluation system/criteria:

The students' achievements are evaluated by the Ministry of Education and Science of Georgia on 3 January 5, 2007 and with the terms stipulated by the Orders No.102 / n of 18 August

The student's assessment unit is used to credit the European system of accumulation and transfer of credit, which reflects the volume of work performed by the student to carry out the subject, expressed in the unit of time. 1 ESTS credit includes 25 hours.

Student's credit can be obtained only in the educational component envisaged by an educational program only after achieving the syllabus planned learning outcomes, which is expressed by one of the positive assessments provided by the credit system.

The student's assessment for the conducted labor provides:

- a) Intermediate estimates, maximum - 60 points, which in turn include student evaluation of independent work, daily activity and current rating. The interim assessment is multi-component and is defined by syllabus of training courses;
- b) Final examination assessment.

Maximum assessment of the course / module is 100 points where the maximum score of final exam is 40 points. From the evaluation methods will be mainly used: midterm and summary tests (both closed and open questions), oral presentations, final test, activity in laboratory or practical studies and group work.

The specific criteria for evaluation are determined by the syllabus of the appropriate course.

The student is obliged to attend at least two thirds of the lecture hours and at least 21 points in current assessments. Otherwise, he/she will not be allowed to pass the final exam.

If the student gets less than 20 points on the final examination, he/she is considered to be failed. If the sum of the final and the

current evaluation is more than 40 points. the student is entitled to pass the additional exam, which is considered to be less than 50% in the case of the "F".

Assessment ESTS credit system allowed 5 types of positive and 2 types of negative assessment.

The student's work is evaluated by the following scheme:

Positive evaluation:

A) A - Excellent 91 - 100 points of maximum evaluation

b) B - Very Good 81 - 90 points of maximum evaluation

C) C - Good 71 - 80 points of maximum evaluation

D) D - Satisfactory 61 - 70 points of maximum evaluation

E) E - Sufficient 51 - 60 points of maximum evaluation

Negative Evaluation

f) FX - Did not pass 41-50 points of maximum evaluation, meaning that a student requires some more work for passing and is given the right to sit an additional examination by means of an independent work;

G) F - Failed 40 and less points of maximum evaluation that means that the work of the student is not sufficient and he/she has to retake the course again.

Specific criteria for assessing student achievements in the study course are determined by the appropriate syllabus.

Bachelor's work is estimated at 100 points. (Syllabus attached).

Note: Intermediate and final (additional) examinations will be conducted in formalized manner.

Assessment criteria in individual courses are defined by the relevant course syllabus.

Spheres of employment:

Can work in: public and individual types of farmers and cooperative farms, teaching and scientific research institutions, colleges and schools, expertise and consulting services at agriculture services; Agriculture, governmental, non-governmental and continuing studies in the relevant areas of master's degree.

Supporting / necessary resources for learning

Describe the material-technical base of the educational program implementation:

Resources required for implementation

a) Material resources

Material-technical base for specialization: agro technologies, plant protection, forestry, includes research projects of Chakvi and Gvara of Agrarian Service Center of Agriculture, Research subjects of Tea Subtropical Crops and Tea Industry Research Institute (SAU), Batumi Botanical Garden, BSU Agrarian and Membrane Kobuleti, Khelvachauri, Keda, Shuakhevi and Khulo region, Kobuleti Tea processing enterprise, BSU Technological Faculty of citrus and other subtropical cultures (green cape), LEPL Ajara Forestry Agency, Forest Persecution, Forest Research Institute, Phytopathology and Biodiversity Research Institute – Shuakhevi laboratory of fighting against diseases and pests of plants, Municipal Service laboratory. (Corresponding memorandums are attached).

Apart from this, St. Tbel Abuseridze State University of Georgia is equipped with a large number of study cabinets, library, conference and meeting rooms, modern computers, accessible to media outlets that lead to adequate level of doctoral and handling academic processes.

b) Human Resources: Implementation of an educational program is provided by highly qualified pedagogical staff, educational disciplines shall be conducted by academic staff of the relevant profile with experience in professional activities and in parallel pedagogic activities in the field of scientific research, practical and methodical work.

#	Human Resources	Academic Degree	Position
1.	Rezo Jabnidze	The Academician of the Academy of Agricultural Sciences of Georgia.	Invited lecturer
2.	Vano Papunidze	The Member / Correspondent of the National Academy of Sciences.	Invited lecturer
3.	Rezo Vasadze	Academic Doctor of Agriculture	Professor
4.	Tsiuri Gogitidze	Academic Doctor of Agriculture	Professor
5.	Nana Jabnidze	Academic Doctor of Agriculture	Professor
6.	Ruslan Davitadze	Academic Doctor of Agrarian Sciences	Associated Professor
7.	Miranda Gorgiladze	Academic Doctor of Agrarian Sciences	Professor
8.	Tamila Ardemanishvili	Academic Doctor of Agrarian Sciences	Professor
9.	Lamzira Gorgiladze	Academic Doctor of Agriculture	Invited lecturer
10.	Guram Chkhubadze	Academic Doctor of Biology	Invited lecturer
11.	Roman Margalitadze	Academic Doctor of Technical Sciences	Invited lecturer
12.	Suliko Beridze	Academic Doctor of Veterinary Medicine	Invited lecturer
13.	Phadiko Abuselidze	Academic Doctor of Technical Sciences	Professor
14.	Nunu Nakashidze	Academic Doctor of Agriculture	Invited lecturer
15.	Leila Ebralidze	Academic Doctor of Agriculture	Invited lecturer
16.	Nargiz Alasania	Academic Doctor of Biology	Invited lecturer
17.	Shota Lominadze	Academic Doctor of Agriculture	Invited lecturer
18.	Shota Lamparadze	Academic Doctor of Agriculture	Invited lecturer
19.	Rusudan Dumbadze	Academic Doctor of Agrarian Sciences	Invited lecturer
20.	Liana Koiava	Academic Doctor of Chemical and Biological Engineering	Invited lecturer
21.	Lili Doliidze	English Language Lecturer	Invited lecturer

Map of learning outcomes

N	Components	Number of credits	Competences					
			Field competences					
			Knowledge and understanding	Ability to apply knowledge in practice	Judgment skills	communication skill	Learning skills	Values
	Mandatory Courses							
1	History of Georgia	3	X	X	X			
2	Academic Writing	3	X	X	X	X	X	
3	Philosophy	2	X	X	X			
4	Psychology	2	X	X	X			
5	Office Computer Programs	5	X	X			X	
6	Foreign Language	5	X	X	X	X	X	X
7	Mathematics	5	X	X	X			
8	Botany	5	X	X		X		

9	Agricultural Microbiology	5	X	X	X			
10	Agrochemistry	6	X	X	X		X	
11	Phytophysiology, Biochemistry	5	X	X	X			
12	Introduction to Chemistry	4	X	X	X			
13	Soil Studies	5	X	X	X	X		
14	Agricultural phyto genetics, Selection	5	X	X	X	X		
15	Agrometeorology	5	X	X	X			
16	Agricultural Entomology	5	X	X	X	X		
17	Agricultural Phytopathology	5	X	X	X	X		
18	Husbandry	5	X	X	X	X		
19	Agricultural Mechanization - Electrification	5	X	X				
20	Breeding	4	X					
21	Environmental protection and natural resources	4	X	X	X			
22	Agricultural melioration	4	X	X				
23	Dendrology	4	X	X	X			
24	Agroecology	5	X	X	X	X		
Module 1. „Agro technologies” (No more than 60 credits) Supervisor								
1.1	Market gardening, Greenhouse	5	X	X	X			

1.2.	Subtropical Cultures	5	X	X	X			
1.3.	Plant-growing - Food Production	5	X	X	X			
1.4.	Seed Breeding-Species Studying	5	X	X				
1.5.	Organic agriculture	5	X	X	X			
1.6.	Fruit -growing	5	X	X	X	X		
1.7.	Tea - growing	5	X	X	X	X	X	
1.8.	Internship	5	X	X	X	X	X	X
	Bachelor's Thesis	10	X	X	X	X	X	X
	Module optional courses	10						
	Viticulture and Winery	5	X	X	X			
	Technical Cultures	5	X	X	X			
	Beekeeping	5	X	X	X			
	Agroecology	5	X	X	X	X		
	Intensive technologies for the maintenance of agricultural crops	5	X	X	X	X		
	Drug plants - growing	5	X	X	X	X		
	Food Products Protection	5	X	X	X	X	X	X
	Agro-ecological monitoring, expertise	5	X	X				
	Agricultural products processing technology							

	Decorative gardening	5	X	X				
	Module 2. "Plant Protection" (No more than 60 credits)							
2.1	Forestry entomology	5	X	X	X			
2.2.	Forestry Phytopathology	5	X	X	X			
2.3.	Herbology	5	X	X	X			
2.4.	Immunity of plants, predicting diseases of harmful insects	5	X	X	X	X		
2.5.	Plant quarantine	5	X	X	X	X	X	X
2.6.	Plant biological protection	5	X	X	X	X		
2.7.	Chemical protection of plants	5	X	X	X	X		
2.8.	Internship	5	X	X	X	X	X	X
	Bachelor's Thesis	10	X	X	X	X	X	X
	Module optional courses	10						
	Ecology of subtropical cultures	5	X	X	X	X		
	Pesticide activity plants	5	X	X	X	X		
	General Entomology	5	X	X	X	X		
	General Phytopathology	5	X			X		
	Insect ecology	5	X	X		X		

	Forest biological and chemical protection	5	X	X	X	X		
	Chemistry in agriculture and environmental protection	5	X	X		X		
	Organic agriculture	5	X	X	X			
	Pesticide activity plants	5	X	X	X	X		
Module 3. "Forestry" (No more than 60 credits)								
3.1	Forestry entomology	5	X	X	X			
3.2.	General Forestry	5	X	X	X			
3.3.	Forest cultures	5	X	X	X			
3.4.	Forestry Phytopathology	3	X	X	X	X		
3.5.	Forest Variation Statistics	5	X	X	X			
3.6.	Taxation 1	5	X	X	X			
3.7.	Forestry	4	X	X	X			
3.8.	Wood Studies	4	X	X				
3.9.	Taxation 2	4	X	X	X			
3.10.	Internship	5	X	X	X	X	X	X
Module optional courses								
	Forest soil studies- Agrochemistry	5	X	X	X	X		

	Biogeography		X	X	X			
	Timber producing and transportation	5	X	X	X	X		
	Georgian Forests	5	X	X				
	Forest economy and legislation	5	X	X				
	Forest biological and chemical protection	5	X	X	X	X		
	Protected Areas and Reserves	5	X	X				
	Indirect usage of forest	5	X	X	X			

N	Components	Number of credits	Number of hours	Including								Distribution of credits according to terms							
				Lecture	Practical	Practical laboratory	Work in group	Practice	Midtest	Final Test independent, work	I term	II term	III term	IV term	V term	VI term	VII term	VIII term	
				5	6	7	8	9	10	11	12	1	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	University Academic Courses	35																	
1	History of Georgia (general course)	3	75	15			15		1	2	42	3							
2	Academic Writing	3	75				30		1	2	42	3							
3	Philosophy	2	50	15			15		1	2	17	2							
4	Psychology	2	50	15			15		1	2	17	2							
5	Office computer programs	5	125		45				1	2	80	5							
6	Foreign Language (English) A1	5	125				45		1	2	80	5							
	Foreign Language (English) A2	5	125				45		1	2	80		5						
	Foreign Language (English) B1	5	125				45		1	2	80			5					
	Foreign Language (English) B2	5	125				45		1	2	80				5				

	Mandatory Courses	85																	
7	Mathematics	5	125	15			27		1	2	80	5							
8	Botany	5	125	15			27		1	2	80	5							
9	Agricultural Microbiology	5	125	15	6	21			1	2	80		5						
10	Agrochemistry	5	125	15	9	18			1	2	80			5					
11	Phytophysiology, Biochemistry	5	125	15	6	21			1	2	80		5						
12	Introduction to Chemistry	5	125	15		17	10		1	2	80		5						
13	Soil Studies	5	125	15	6	21			1	2	80		5						
14	Agricultural phytogenetics, Selection	5	125	15			27		1	2	80		5						
15	Agrometeorology	5	125	15			27		1	2	80			5					
16	Agricultural Entomology	5	125	15	14	13	17		1	2	80			5					
17	Agricultural Phytopathology	5	125	15	27				1	2	80			5					
18	Husbandry	5	125	15			27		1	2	80			5					
19	Agricultural Mechanization - Electrification	4	125	15			27		1	2	80				4				
20	Breeding	4	100	15			27		1	2	55				4				
21	Environmental protection and natural resources	4	100	15			27		1	2	55				4				
22	Agricultural melioration	4	100	15			27		1	2	55				4				
23	Dendrology	4	100	15			27		1	2	55				4				

24	Agroecology	5	125	15			42		1	2	65					5		
Free componer (module/subject)																		
Module 1. „Agro technologies” (No more than 60 credits)																		
1.1	Market gardening, Greenhouse	5	125	15	6		21		1	2	80					5		
1.2	Subtropical Cultures	5	125	15	11		16		1	2	65					5		
1.3.	Plant-growing - Food Production	5	125	15	27				1	2	80					5		
1.4.	Seed Breeding-Species Studying	5	125	15	27				1	2	80					5		
1.5.	Organic agriculture	5	125	15	4		23		1	2	80						5	
1.6.	Fruit -growing	5	125	15	12		15		1	2	80						5	
1.7.	Tea - growing	5	125	15	12		15		1	2	80						5	
1.8.	Internship	5						123		2							5	
	Bachelor's Thesis	10	250				90			1	159						10	
	Module optional courses	10	250													5	5	
	Viticulture and Winery	5	125	15			27		1	2	80							
	Technical Cultures	5	125	15			27		1	2	80							
	Beekeeping	5	125	15	27				1	2	80							
	Agro-ecological monitoring, expertise	5	125	15			27		1	2	80							
	Intensive technologies for taking care of agricultural cultures	5	125	15	12	15			1	2	80							

	Drug plant growing	5	125	15			27		1	2	80						
	Food Products Protection	5	125	15			27		1	2	80						
	Agricultural products processing technology	5	125	15			27		1	2	80						
	Decorative gardening	5	125	15	16		11		1	2	80						
Module 2. "Plant Protection" (No more than 60 credits)																	
2.1.	Forestry entomology	5	125	15			27		1	2	80				5		
2.2.	Forestry Phytopathology	5	125	15	14	13			1	2	80				5		
2.3.	Herbology	5	125	15	13	14			1	2	80				5		
2.4.	Immunity of plants, predicting diseases of harmful insects	5	125	15			27		1	2	80				5		
2.5.	Plant quarantine	5	125	15			27		1	2	80					5	
2.6.	Plant biological protection	5	125	15			27		1	2	80					5	
2.7.	Chemical protection of plants	5	125	15	14	13			1	2	80					5	
2.8.	Internship	5	125					123		2							5
	Bachelor's Thesis	10	250				90			1	159						10
	Module optional courses	10													5	5	
	General Phytopathology	5	125	15			27		1	2	80						
	Pesticide activity plants	5	125	15			27		1	2	80						
	General Entomology	5	125	15			27		1	2	80						

	Insect ecology	5	125	15			27		1	2	80							
	Organic agriculture	5	125	15	4		23		1	2	80							
	Forest biological and chemical protection	5	125	15			27		1	2	80							
	Chemistry in agriculture and environmental protection	5	125	15		12	15		1	2	80							
	Ecology of subtropical cultures	5	125	15	18		9		1	2	80							
Module 3. "Forestry" (No more than 60 credits)																		
3.1.	Forestry entomology	3	75	15	13	14			1	2	30				3			
3.2.	General Forestry	4	100	15			42		1	2	40				4			
3.3.	Forest cultures	3	75	15			27		1	2	30				3			
3.4	Forestry Phytopathology	3	75	15			27		1	2	30						3	
3.5	Forest Variation Statistics	5	125	15			27		1	2	80				5			
3.6	Forest Taxation 1	5	75	15			27		1	2	30				5			
3.7	Forestry	4	100	15			27		1	2	55						4	
3.8	Wood Studies	4	100	15			27		1	2	55						4	
3.9	Forest Taxation 2	4	100	15			42		1	2	40						4	
3.10	Internship	5	125	15				80		2	43						5	
	Bachelor's Thesis	10	250			90					160						10	
	Module optional courses	10													5	5		

	Forest soil studies - Agrochemistry	5	125	15			27		1	2	80								
	Biogeography	5	125	15			27		1	2	80								
	Timber producing and transportation	5	125	15			27		1	2	80								
	Georgian Forests	5	125	15			27		1	2	80								
	Forest economy and legislation	5	125	15			27		1	2	80								
	Forest biological and chemical protection	5	125	15			27		1	2	80								
	Indirect usage of forest	5	125	15	27				1	2	80								
	Protected Areas and Reserves	5	125	15			27		1	2	80								
Total	Additional specialties (Minor) / University Optional Courses From any Curriculum / Optional block of specialty	60														15	15	15	15