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The double degree set up by the respective agreement signed between Gavar State University from Armenia and the University of Coruna from Spain (UDC) is intended to be a relevant academic tool to achieve the basic objectives of the RETHINKe project in the field of Environmental Sciences.

The aim of the agreement is to establish a double degree program with regard to these official degrees:

- a) Master in Science in Environmental Science, Technology and Management, official degree of the current academic offer of UDC.
- b) Master in Science in Environmental Protection and Use of Nature, official degree of the current academic offer of GSU.

The double degree basic objectives in the field of Environmental Sciences for both universities are:

- ✓ To promote the reform and modernization of higher education in Armenia.
- ✓ To enhance the quality and relevance of higher education in Armenia.
- ✓ To build up the capacity of higher education institutions in Armenia and Spain, in particular for international cooperation and for a permanent modernization process, and
- ✓ To assist them in opening themselves up to society at large, the world of work and the wider world.
- ✓ To foster the reciprocal development of human resources in both institutions.
- ✓ To enhance networking among UDC and GSU.
- ✓ To enhance mutual understanding between peoples and cultures of Spain and Armenia.

Students taking part in this double degree program will have to get a total of 120 ECTS credits to be awarded with both degrees. Part of those total ECTS credits must be earned at Gavar State University and other part at the university of Coruna.

Gavar State University has set up a proper internal procedure to select the students that take part in the double degree.

In any case, every Gavar State University student taking part in this program must accredit a B1 level in English language. Students accredit their language level by means of internationally wholly recognized certificates (Cambridge, TOEFL, IELTS, TELC, etc.) or official national certificates at Gavar State University.

The program is open to the students who received a bachelor's degree, are fluent in English and willing to act in the international environment.

- ✓ Tuition fees corresponding to official local regulations for 48 credits (currently: 1881 .6 €) + 250/o of 12 credits (currently 117.6 €): TOTAL: 1999.20 €.
- ✓ At UDC, students from GSU will have to pay a <degree issuance tax> of 123.10 €, when they finally request the official diploma from the university authorities. This tax cannot be waived according to Spanish internal regulations.
- ✓ At GSU, students from UDC will have to pay a <degree issuance tax> of 81.80 €, when
- ✓ they finally request the official diploma from the university authorities.

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**THE MINISTRY OF EDUCATION
GAVAR STATE UNIVERSITY**

**CONCEPT OF MASTER DEGREE'S EDUCATION PROGRAM
FOR "ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT"**

1. Academic Program Code: 020800

Profession: "Environment and Natural Resources management"

The Master degree: Environment and Natural Resources management

2. The legal basis for education program implementation

"Environment and Natural Resources management" / 020800 / specialty approved by the Government of the Republic Armenia in 2007, August 30, N 1038-N.

3. Admission requirements for applicants

Applicant's previous level of education: bachelor and certified specialist.

4. Graduate's qualification or qualification degree:

Master of Ecology by specialty of "Environment and Natural Resources management"

1. ACADEMIC PROGRAM CHARACTERIZATION

- 1.1 Concept of the educational program for "Environment and Natural Resources management" specialty (hereinafter - The Concept) is a set of requirements, which are necessary for Gavar State University (hereinafter – The University) to perform basic educational program (hereinafter - BEP) for this specialty of Masters.
- 1.2 The University has the right to implement "Environment and Natural Resources management" specialty basic educational program based on licenses issued in 2010 by the State Administration Authorized Body.
- 1.3 These provisions of The Concept relate to:
 - ✓ The University's academic and administrative staff,
 - ✓ Students,
 - ✓ Members of the State Examination and Qualification Commissions,
 - ✓ Employers and their representatives in the field of specialty,
 - ✓ Other stakeholders.

2. GENERAL CHARACTERISTICS OF "ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT" /020800/ SPECIALTY OF MASTER PREPARATION BY THE BASIC EDUCATIONAL PROGRAM

21. The University is holding higher education program of "Environment and Natural Resources management" specialty, from which ended on their studies and passed the certification of persons will assigned the specialty of "Ecology Master's" degree by "Environment and Natural Resources management" specialty.

The basic educational program of "Environment and Natural Resources management" specialty is a set of methodological documents, which includes:

- ✓ Curriculum,
 - ✓ Specialties program of training modules,
 - ✓ Documents and materials to providing the quality of the educational system and training of students,
 - ✓ Practices programs and schedules,
 - ✓ The educational and methodological materials providing the introduction of appropriate educational technology.
22. The Master BEP regulatory period in the form of training courses is two years, the total annual teaching load is 120 ECTS, calculated to 60 credit /1 credit 30 hours/ in the European Credit Transfer and Accumulation System /ECTS/. BEP provides a 20-week workload of a student per a semester.

3. EDUCATIONAL PROGRAM GOALS AND OBJECTIVES

The program aims are the preparing qualified specialists in the environment and Natural Resources management field, as well as teachers in schools. The specialty is urgent, because the anthropogenic impact on the environment has reached a critical point and mitigation of the existing of ecological stress is not possible without a deep and thorough knowledge of the environment.

4. THE DESCRIPTION OF GRADUATE-SPECIALIST (OUTCOMES OF EDUCATIONAL PROGRAM – GENERAL AND ORIGINAL PROFESSIONAL COMPETENCE)

Master of "Environment and Natural Resources management" specialty in professional activities and main objectives of the educational programs must possess the following general and professional competencies.

4.1 General competences.

Graduate in Master of Ecology after mastering basic educational program.

KNOW:

- ❖ The Constitution, legislation in the field of education, legal and regulatory acts relating to education and his profession,
- ❖ The main provisions of the humanitarian and socio-economic subjects,
- ❖ Basic philosophical directions,
- ❖ Fundamentals of economic theory, economic specifics of the transition period,
- ❖ Armenian people's history and current political developments,
- ❖ Guidelines of State educational policy,
- ❖ Practical actions of civil defense and emergency situations,
- ❖ Ethical and legal norms in relationships of human and society, human and environmental,
- ❖ Environmental importance in the development of modern times,
- ❖ Scientific structure of environmental chemistry,
- ❖ Modern tasks and functions of environmental chemistry,
- ❖ Basic principles and provisions of environmental chemistry,
- ❖ Basic principles and concepts of modern science, global and regional environmental issues, environmental education issues,
- ❖ Methods to objective assess of research.

BE ABLE TO:

- ❖ Organize his activity in the field of education, on the basis of the RA law's provisions,
- ❖ Plan, organize, implement, manage, monitor, evaluate pupils' education process,
- ❖ Solve problems, make decisions,
- ❖ Qualified planning of written and oral speech,
- ❖ Work on computer, obtain necessary information and coordinate, analyze them,
- ❖ Using modern informative technologies to acquire knowledge in modern technologies of the field of training their own,
- ❖ Design and implement pedagogical experiment, make conclusions, generalize experimental results, present obtained results,
- ❖ Use and present the results of education and educational research in various fields,
- ❖ Perform scientific experiments in the field of environmental chemistry, evaluate and interpret the results.

POSSES:

- ❖ Moral and legal norms governing the interpersonal relationships and social rules of conduct,
- ❖ Professional (spoken and written) and two foreign languages for communication,
- ❖ Physical improvement measures
- ❖ Thematic knowledge necessary in the professional field,
- ❖ Methods to solve psychological and methodological problems,
- ❖ Principles and development areas of environmental chemistry,
- ❖ Computer methods to information collection, storage, processing and coordination,
- ❖ Modern methods of education and pedagogical upbringing,
- ❖ Methods of research planning and organizing,
- ❖ Independent and analytical evaluation methods of experiments' results.

4.2 Professional competences.

Graduate in Master of Ecology after mastering professional educational program should:

KNOW:

- ❖ Methodology and scientific principles, fundamental provisions, the object of the study, methods of Ecology science,
- ❖ Inorganic and organic materials, production technologies, their and environment communication,
- ❖ Classical and modern methods of automated analysis toxic substances,
- ❖ Introduction of the principles of wasteless technologies in production,
- ❖ Chemistry of environmental pollutants and compounds, environmental issues and solutions for their clearance,
- ❖ Phenomena occurring in the environment and chemistry of environmentally friendly materials,

- ❖ Anthropogenic impacts on the environment, the ecological principles of rational utilization,
- ❖ Ecological problems of the atmosphere pollution, the structure of the atmosphere components, photochemical reactions in the atmosphere, atmospheric pollutants and environmental effects of air pollution,
- ❖ Wasteless production, gaseous, liquid and solid wastes from different areas and their neutralization methods
- ❖ Chemical composition of foods,
- ❖ Standardization of chemicals, their rationing and complex cash features in the environment,
- ❖ The main tasks of environmental monitoring,
- ❖ Behavior, transformations and consequences of chemical compounds entering to the biosphere by the materials cycle,
- ❖ The main causes of the ecological state of tension in the big cities,
- ❖ Security requirements for field and laboratory works and methods of rendering first aid in case of accidents.
- ❖ Environmental and ecological achievements of modern science,
- ❖ Practical problems in various areas of environmental,
- ❖ Effective ways of use and protection of land resources,
- ❖ Environmental impact on human heredity,
- ❖ Anthropogenic stress and toxic waste as a limiting factor,
- ❖ Methods of rational nature management,
- ❖ Human support issues by natural resources.

BE ABLE TO:

- ❖ Collect statistical data about processing ecological expertise,
- ❖ Carry out ecological expertise and make ecological documents necessary for businesses
- ❖ Organize ecological monitoring, assess and forecast the anthropogenic impact on environment, monitoring the state of the environment,
- ❖ Determine the function of each ecosystem as a natural part of the environmental control,
- ❖ Independently analyze the negative effects of air pollution, ozone depletion, acid rain, the ways of effective forms and methods for reducing them,
- ❖ Predict the behavior of various pollutants in the environment and the damage, to take the necessary measures for its prevention and elimination,
- ❖ Determine the relevant environmental the degree of pollution with samples of pollutants and the composition and to make maps of pollution dispersal according classify by the degree of pollution areas,
- ❖ Calculate absolute and relative indicators of economic efficiency environmental costs,
- ❖ Define the concept of environmental law, describe special and professional methods

of environmental law, to identify the forms of interaction society and the nature, analyze sources of environmental law, describe areas of state legal expertise, analyze the rights and obligations of the expertise participants, set the soil right, targeted, effective use,

- ❖ Support the conservation and restoration of plant communities in the Republic of Armenia,
- ❖ Perform field and laboratory work, keeping safety rules,
- ❖ Use of foreign professional literature,
- ❖ Develop action plans for conservation and efficient of natural resources, influences of individual human on a result of the changes in the biosphere,
- ❖ Perform environmental mapping independently,
- ❖ Participate in the project works and give accurate environmental solutions
- ❖ Make research work independently.

POSSES:

- ❖ Basic environmental concepts, general and specific methods of study environmental law, the principles of legal expertise,
- ❖ Forms of interaction of society and nature, basic concepts of environment and nature management, legal protection of the animal world, the role and significance of the red book,
- ❖ Discovering and prevention activities of negative anthropogenic processes that taking place in an environment,
- ❖ Different analytical methods to perform soil surveys, methods of determining the geographical distribution various type of soils using soil maps,
- ❖ Methodology of analyze weather and environmental facilities and the ways of its implementation,
- ❖ Modern methods of industrial emission control and clearance,
- ❖ Methods of cleaning and protection of waters, methods of minerals rational use, principles of classification and organizing of the monitoring system,
- ❖ Improve ways of fertilization low natural type soils, measures to prevent erosion processes, protection and efficient use of soil resources,
- ❖ Modern forms and methods of agroecosystem monitoring, the existing basic principles of agroecosystem,
- ❖ Modern methods of problems solving in different areas of environment,
- ❖ Methods laying of field research experience as well as methods of laboratory research,
- ❖ Practical applications of monitoring, assessment and forecasting techniques of environment,
- ❖ Methods of decontamination of industrial emissions, the modern methods of research work.

5. THE REQUIREMENTS TO PROVIDING STAFF FOR THE EDUCATIONAL PROCESS

The implementation of Master BEP should be ensure by scientific teaching staff, which typically must have relevant vocational basic education for teaching disciplines and should carry out research or methodological activity. At least 30% of the lecturers who providing the training must have an academic degree and (or) title, including in the vocational discipline by "Environment and Natural Resources management" specialty. On the educational process can also be included lecturers from the staff of basic public schools, instructors, relevant organizations, institutions.

6. SOFTWARE OF PROFESSIONAL EDUCATIONAL PROGRAM

The preparation of Master BEP is includes training sections:

- ✓ General professional,
- ✓ Supplementary,
- ✓ Specialized training,
- ✓ Research:
 - Workshop supervisor
 - Research work
 - Research Practice
 - Pedagogical practice
- ✓ Final attestation, state qualification.

The courses are divide into modules. Results of each training module are obtaining the competencies, which are necessary for future professional activities.

The preparation of Master BEP should have to include the following items: philosophy and methodology of science, information technologies in professional research.

As a procedural point of view, the disciplines were divide into four groups:

- a) Training is obligatory and is taught in a strict sequence,
- b) Education is obligatory, but not strictly sequential,
- c) Disciplines chosen by the student,
- d) Elective courses of related programs.

In Curriculum of each discipline (module) should be clearly formulated the training outcomes - the learned competencies: knowledge, abilities and skills (in all level of BEP) in organic unity.

**MODULES' STUDY
PLANS**

<i>Name of modules</i>	<i>Year, Semester, ECTS</i>	<i>Short description</i>
Methodology of Scientific Research	1st year, 1 semester, 3	The aim of the course is to introduce the students to the basic concepts of the philosophy of science and the correlation between science and philosophy, the origin and development of the main stages of science. The students will gain knowledge on the basic levels and methods of scientific knowledge. Special attention is paid to the development of modern methodological concepts of science.
Contemporary Issues of Ecology	1st year, 1 semester, 3	The aim of the session is to introduce the students with the modern environmental problems, state of natural ecosystems and the strict conceptual connection of surrounding environment, as well as the global issues and main contradictions of ecological development, to help orient students to correct problems caused by ecological solutions.
Anthropogenic Sources of Air Pollution	1st year, 1 semester, 3	The aim of the course is to acquaint the students with the most significant sources of environmental pollution and to show what kind of materials are exhausted in the atmosphere by each sphere and what are their allowable quantities. The orientation of the course is the explanation of the physico-chemical properties of contaminated materials and the impact of non-allowable amounts on global climate change.
Foreign Language (Major in English)	1st year, 1 semester, 3	The purpose of this session is more complex and complete analysis of the performance of the English texts, the acquisition of rather deep knowledge on grammar and pronunciation. The emphasis is placed on understanding the nature of the phonetic and grammatical units, and it occurs to strengthen the professional terminology in the analysis and interpretation of texts.

<p>Genetic Engineering</p>	<p>1st year, 1 semester, 3</p>	<p>The main objective of Genetic Engineering course is to develop proper knowledge about the main methods of recombinant DNA technologies and cell engineering, as well as about the application of those methods on biotechnological purposes in different areas, generation of transgenic or genetically modified organisms, bacteria, plants, perspectives of human genetic engineering development, bioethics and biosafety.</p>
<p>Current Problems of Organic Agriculture</p>	<p>1st year, 1 semester, 3</p>	<p>The course aims to develop proper professional understanding about contemporary problems of organic agriculture caused by the use of bacteria, development of technologies applying bio-incentives based on bacteria, bio-fertilizers and pest control biological methods, land restoration and bioremediation, plant- microbe-soil coexistence and so on.</p>
<p>The Environment and Human Inheritance</p>	<p>1st year, 1 semester, 3</p>	<p>The aim of the course is to study the environment of human reproduction and development, give the classification of the factors of the environment affecting human heredity as well as the description of consequences of the factors influence on a human being.</p>
<p>Current Problems of Industrial Waste Prevention</p>	<p>1st year, 1 semester, 3</p>	<p>The aim of the course is to explain and show the students the physical and chemical methods of water purification as well as the purification of components exhausted by the industrial enterprises. The allowable limits of certain toxic components as compared with the waste toxic materials are shown in the course.</p>
<p>Information Technologies in Professional Research</p>	<p>1st year, 1 semester, 3</p>	<p>The aim of the course is to acquaint students with the basic functions of modern information systems and information technology, as well as discuss and teach their application features in the fields of their professional activity. The course comprises materials on the basic structural and functional features of information systems and information technologies. The main attention is paid to the teaching of information technologies of the office automation. Practical work on the main information technologies is provided.</p>

Seminars on Research	1st year, 1 semester, 3	Master's Degree students are provided with research methodological support during the academic supervisor's meeting. They obtain a certain skill to present reports, to conduct scientific debate, make speeches.
The Basics of Efficient Usage and Preservation of Land Resources	1st year, 2 semester, 3	The aim of the course is to give students perceptions on contemporary issues of land use, in land-use process the anthropogenic influence on the properties and characteristics of soil change, deepening erosion processes, chemical and radioactive contamination as a result of land degradation, which has become a global environmental problem.
Applied Ecology	1st year, 2 semester, 3	This course studies the scientific basis of environmental protection. It provides guidance on protection methods and the rational use of natural resources and studies the mechanisms of environmental regulation of the economic activity.
Ecological Mapping	1st year, 2 semester, 3	The main objective of the course is to acquaint students with theoretical basics of Ecological Mapping, Sources of Ecological Maps, methodology, contents of Ecological Maps and methods of making them, fields of map application.
Anthropogenic Influence Monitoring on Environment	1st year, 2 semester, 3	The course aims to interpret the control methods applied in the environmental monitoring system. The course provides objective data on the real condition of natural habitats, the anthropogenic factors impact on them and future predictions, justifies the necessity for the organized service and unique systems to control and assess the natural habitat condition in the given intensive anthropogenic impact areas, as well as global scales.
Ecological Regularities of Evolution	1st year, 2 semester, 3	The aim of the course is to explain the environmental phenomena and their impact on organisms during the evolution development. The course describes the creation processes of new types, biochemical changes in cells in different ecological conditions of the environment, morpho-physiological and evolutionary changes of the organisms.

Social Ecology and Culture	1st year, 2 semester, 3	The subject aims to acquaint te higher education institution students with socio-ecological, cultural issues and problems arising from the humanity and its social environment.
Basics of Environmental Epidemiology	1st year, 2 semester, 6	The main objective of the subject is to provide the Master students the recent data on the prevalence of diseases resulting social problems, their reasons, molecular mechanisms of diseases, their diagnosis and treatment problems, as well as issues of ecological factors impact and pathological processes development.
Biodiversity Protection Issues (by the example of Sevan basin)	1st year, 2 semester, 3	The main objective of the course is to acquaint students with peculiarities of management and sustainable use of biodiversity, its conservation, reproduction and development. Having a thorough understanding of the course on biodiversity is of vital importance for biodiversity conservation and sustainable use to conduct its scientific studies properly.
Seminars on Research	1st year, 2 semester, 3	Master’s Degree students are provided with research methodological support during the academic supervisor’s meeting. They obtain a certain skill to present reports, to conduct scientific debate, make speeches.
Research Work	1st year, 2 semester, 3	During the research work the thesis proposal preparation by the master student agreed with his/her supervisor is made. After the approvement of the proposal the scientific research is made (collecting materials, analyzing and systematizing them, theoretical summaries.
Technogenic Systems and Ecological Risk	2nd year, 1 semester, 3	The course describes the technical systems created by people, which are harmful for the environment and the possibility of being hurt by any danger is riskful for a man. The purpose of the study is to view the risk assessment system of technogenic factors impact on human beings, planning and analysis of biotechnical system performance from the perspective of anthropogenic pollution of the environment, ways of preventing disastrous outcomes of the ecological crisis.

Contemporary Issues of Agroecology	2nd year, 1 semester, 3	Agroecology is the main direction in Applied Ecology the main goal of which is to give knowledge to students on basic principles of Agroecology and usage of chemistry in the process of land cultivation, irrigation and drainage, plant diseases and pests to combat environmental issues.
Ecological Aspects of Rational Use of Nature	2nd year, 1 semester, 3	The aim of the subject is to introduce students the basics of natural systems' formation and the activity of the use of nature, human being-nature-society relations, ecological issues, main directions of rational use.
Relations between Society and Nature in the History of Civilization	2nd year, 1 semester, 3	The course aims to communicate knowledge of the interactions between the nature and society in different ages of society development – from the Stone Age to the present age of industrial development. Different forms of human activities impact on the nature are described depending on the nature of use and type of preparing working
Problems of Climate Change and Desertification	2nd year, 1 semester, 3	The course aims to develop a good knowledge of natural and anthropogenic changes taking place in the geographical membrane and their impact on climate changes.
Ecological Microbiology	2nd year, 1 semester, 3	The course aims to develop a proper expert insight of the contemporary problems in Ecological Microbiology, the development of bacteria in natural habitat, adaptability of bacteria to the extremal conditions, interactions between bacteria and organisms existing in different levels of live materials and abiotic environmental factors development,
Modern Aspects of Ferment Treatment	2nd year, 1 semester, 3	The course describes the use of the achievements of biological and medical chemistry in modern medicine and medical practice. It describes the therapeutic activity of the cells as ferments actively participating in various biochemical systems in the case of pathology. This course introduces the mechanisms and the use methods of some widely used ferments' influence, ferments, which are used for the treatment of various diseases.

<p>Seminars on Research</p>	<p>2nd year, 1 semester, 3</p>	<p>Master's Degree students are provided with research methodological support during the academic supervisor's meeting. They obtain a certain skill to present reports, to conduct scientific debate, make speeches.</p>
<p>Research Work</p>	<p>2nd year, 1 semester, 6</p>	<p>During the research work the thesis proposal preparation by the master student agreed with his/her supervisor is made. After the approval of the proposal the scientific research is made (collecting materials, analyzing and systematizing them, theoretical summaries.</p>
<p>Seminars on Research</p>	<p>2nd year, 2 semester, 3</p>	<p>Aim and Direction: Master's Degree students are provided with research methodological support during the academic supervisor's meeting. They obtain a certain skill to present reports, to conduct scientific debate, make speeches.</p> <p>Educational outcomes: At the successful completion of the course the student should:</p> <p>Know-about the ecological main principles and the use opportunities of their practical results.</p> <p>Be able to - apply his/her theoretical knowledge in various ecological fields.</p> <p>Possess- main knowledge and working principles of modern biology.</p>

<p>Research Work</p>	<p>2nd year, 2 semester, 3</p>	<p>Aim and Direction: During the research work the thesis proposal preparation by the master student agreed with his/her supervisor is made. After the approval of the proposal the scientific research is made (collecting materials, analyzing and systematizing them, theoretical summaries.</p> <p>Educational outcomes: At the successful completion of the course the student should: Know-theoretical issues and practical use of the main professional subjects. Be able to – use obtained theoretical knowledge to solve subject- matter problems during research work. Possess - methods of collecting and analyzing some materials needed for Master Thesis, abilities to find a problem and solve it independently, use literature sources properly, present accomplished work.</p>
<p>Research and Pedagogical Internship</p>	<p>2nd year, 2 semester, 3</p>	<p>Aim and Direction: The aim of pedagogical internship is to form the ability to plan, implement, evaluate the educational process in higher education institutions and provide the students with skills of implementing scientific pedagogical research.</p> <p>Educational outcomes: At the successful completion of the course the student should: Know-the content and structure of the documents of HEIs, conditions of educational methods and ways' application, the content of course programme, types, peculiarities and structure of the course, the methodology of the course preparation and implementation, the planning principles of the lecturer's educational work, the levels of developing the student's learning independence and contact ways with the student. Be able to - keep in touch with students constantly and follow their work, implement diagnostic and monitoring work, analyze the curriculum, subject programme, textbook, be able to realize educational monitoring, foresee the results of educational process, conduct the course process and discussions, to observe and evaluate implemented work, work cooperating with colleagues</p>

<p style="text-align: center;">Research Internship</p>	<p style="text-align: center;">2nd year, 2 semester, 3</p>	<p>Aim and Direction: Research internship's aim is to expand and deepen professional knowledge of master students, to fix and systematize this knowledge, to develop abilities to make their own research, studies and experiments.</p> <p>Educational Outcomes: At the successful completion of the course the student should:</p> <p>Know - Main provisions of the methodology of research work and the abilities to use them in the Master Thesis preparation process and to <i>analyze</i> the research results. He/she should know the main principles of modern ecology, properties of making weight, quantity and quality analysis.</p> <p>Be able to - prepare and make research work independently, study literature, apply information and communication ways and technology in the field of ecology, solve the problems found during the research, apply the gained theoretical knowledge during the practical work.</p> <p>Possess-the abilities to choose research methods, to adjust them to the goals and problems of the research, to collect scientific information, analyze, systematize and develop it, to possess the skills of the use of modern methods, abilities to present research related materials in the form of reports, publications, presentations, to possess the abilities to present the prepared research work.</p>
<p style="text-align: center;">Master's Thesis Defense</p>	<p style="text-align: center;">2nd year, 2 semester, 12</p>	<p>Educational Outcomes: At the successful completion of the course the student should:</p> <p>Know- the requirements of Master's Thesis and the skills to fulfill them, methods of analyzing and introducing the collected materials. Be able to - continue the work of the master's thesis topic.</p> <p>Possess - thesis-topic related knowledge of other fields.</p>
<p style="text-align: center;">Total for Master course:</p>	<p style="text-align: center;">2 years, 4 semesters, 120</p>	

7. THE REQUIREMENTS TO THE PROVISION OF INFORMATION AND TRAINING- METHODOLOGY FOR THE EDUCATIONAL PROCESS

- ❖ All training courses, subjects and modules by BEP must be provide with training-methodological documents and materials.
- ❖ Implementation of students' extracurricular independent works should be couple with a methodical provision and reasonable expenditure of time.
- ❖ Each student learners by implementation of BEP has permit to access the database, the library fund, receive information and consultation.
- ❖ The library fund should be staffed not only professional, but also corresponding printed and (or) electronic publications of the humanitarian, social and economic disciplines.

8. PROVISION OF THE EDUCATIONAL AND LOGISTICAL RESOURCES FOR PROFESSIONAL EDUCATION PROGRAM

The University with basic educational preparation for Master implementation should have appropriate logistical resources to ensure students disciplinary and interdisciplinary training, laboratorial, practical and research works.

The list of necessary logistical resources for Master program implementation is includes:

- ✓ Audio-visual cabinet,
- ✓ Educational classrooms equipped with multimedia displays systems,
- ✓ Computer laboratory with the possibility of using the global search engines,
- ✓ Training-methodological cabinets,
- ✓ In case of using electronic publications, access to the database.

9. CONCEPTUAL DIRECTIONS OF EDUCATION PROGRAM DEVELOPMENT

In the development concept faculty of natural science outlines the main directions of development.

TRAINING-METHODOLOGICAL AND RESEARCH WORKS IN IMPROVEMENT FIELD ARE PLANNING:

1. The use of modern communications during educational process:

- a) The active communication providing by E-mail between lecturers and students
- b) Useful websites providing to students for informing the latest achievements in the field,
- c) Acquisition of new professional literature and replenishment of library fund.

2. The faculty laboratories stocking by new equipment and supplies:

- a) By searching donor organizations and ways of attracting grants purchase of

- modern laboratory equipment,
b) Request to NAS research institutions for help with laboratory equipment.

3. Activation of academic and research works and improvement of departments' activities:

- a) Demonstrating active participation to international, republican and inter-university scientific conferences and seminars,
- b) Involvement of young scientists and Master students in research works, joint research activities implementation and the results publication,
- c) Regularly updating of curriculums, modernization of coursework themes and individual works from departments,
- d) Ensuring of active participation of students on departments' conferences,
- e) Carry out of individual works with students by low-performing.

4. Increased the efficiency of production practices:

- a) The practice organization in leading scientific institutions and firms based on contracts for the best students to increase competition among students,
- b) Signing of cooperation agreements with new partner organizations,
- c) The proper supervision of production practices by supervisors.

5. Increased the efficiency of departments and teaching staff works:

- a) Increased of courses efficiency, introduction new forms and methods of training,
- b) Training of novice lecturers and recruitment of young lecturers for stock of teaching staff.

6. Increased the discipline of the faculty staff and students.

- a) Increasing of discipline to improve the condition of ensuring quality education, take practical steps to minimize unjustified absences and to prevent incidents of an unprepared appearing during lessons, regularly discussing the strengthening of discipline at Council meetings of the departments and faculty,
- b) To improve assessment and evaluation of the quality education process through of feedback mechanisms. In order to increase the quality of studies conducted anonymous surveys among students, to take into account comments and suggestions made by the students.

7. Strengthen of relations between High School and The University, increasing the interest in the natural sciences.

- a) Schedule visits of relevant teaching staff of departments to senior school,
- b) Using the possibilities of media, university's website and regional television for advertising of specialties natural sciences and for presenting on natural sciences' streams of senior school.

Faculty of Natural Sciences is carrying out consistent work to solve the arising problems.