Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
NAMED AFTER PATRICE LUMUMBA
RUDN University

Agrarian and Technological Institute
educational division (faculty/institute/academy) as higher education programme developer

Approved at the meeting of the Academic Council of RUDN University Protocol No. 1	Opened by order of the Rector of RUDN University No. 44-1
January 24, 2011	January 31, 2011
(date, month, year)	(date, month, year)

PROFESSIONAL EDUCATION PROGRAMME OF HIGHER EDUCATION

Field of Studies/ Speciality:

35.04.04 Agronomy
field of studies / speciality code and title

Profile/Specialisation:

Integrated Plant Protection
higher education programme title

The Educational Programme is developed in compliance with:
Educational Standard of RUDN University, approved by Order of the Rector No. 371
dated   May 21, 2021
(day, month, year)

Level of education:

master's
(bachelor's / specialist's / master's – to fill in the required)

Graduate's Qualification:

Master
(graduate's qualification in compliance with the order of the Ministry of Education and Science of Russian Federation dated September 12, 2013, No. 1061)

Length of Educational Programme:

2 years		
(full-time education)	(part-time education)	(correspondence education)

AGREED by:

Head of Educational Programme	Chairperson of Didactic Council	Head of Educational Department
E.N. Pakina	E.N. Pakina	E.A.Dovletyarova
(signature)	(signature)	(signature)
(day, month, year)	(day, month, year)	(day, month, year)

2024

1. EDUCATIONAL PROGRAMME GOAL (MISSION)

The main goal in the implementation of educational programs in this area of study is to ensure the high quality of training and competitiveness of innovation-oriented specialists using new scientific and laboratory equipment, modern practice bases for priority high-tech sectors of the national economy through integration and cooperation with employers and strategic partners

2. EDUCATIONAL PROGRAMME RELEVANCE, SPECIFICITY, AND UNIQUENESS

The master's program "Agronomy" specialization "Integrated Plant Protection" is the direction of obtaining basic higher education at the Agrarian and Technological Institute of RUDN University. Higher education under the master's program can be obtained full-time. Duration of study: 2 years.

The features of the implementation of the main educational program include the modular principle and the use of elements of e-learning and distance learning technologies. When teaching people with disabilities, e-learning and distance learning technologies provide for the possibility of receiving and transmitting information in forms accessible to them.

The peculiarity of the preparation of masters in the direction 35.04.04 "Agronomy" of the specialization "Integrated plant protection" is that already during their studies in the magistracy they have the opportunity to realize themselves in the field of innovative technologies business.

3. LABOUR MARKET NEEDS FOR PERSONNEL TRAINING IN EDUCATIONAL PROGRAMME PROFILE

Master in the direction of preparation 35.04.04 "Agronomy" specialization "Integrated Plant Protection" is preparing for a research type of professional activity.
Specialists of this profession are in demand at enterprises of various forms of ownership in large state, research and production associations, small and medium-sized businesses, implementation and consulting structures, including foreign companies.

4. SPECIAL REQUIREMENTS FOR POTENTIAL APPLICANTS

A potential applicant of the main educational program in the direction of preparation 35.04.03 "Agronomy" of the specialization "Integrated Plant Protection" must be prepared for activities that require in-depth agricultural, research and pedagogical training and possess the following competencies:

• *general cultural competencies*: the ability to abstract thinking, analysis, synthesis; willingness to act in non-standard situations, bear social and ethical responsibility for the decisions made; readiness for self-development, self-realization, use of creative potential;

• *general professional competencies*: readiness for communication in oral and written forms in Russian and foreign languages to solve the problems of professional activity; willingness to lead a team in the field of their professional activity, tolerantly perceiving social, ethnic, confessional and cultural differences; the ability to make organizational and managerial decisions;

• *professional competencies*

в *areas of research activity:*the ability to summarize and critically evaluate the results obtained by domestic and foreign researchers, identify promising areas, draw up a research program; the ability to substantiate the relevance, theoretical and practical significance of the chosen topic of scientific research; the ability to conduct independent research in accordance with the developed program; the ability to present the results of the research to the scientific community in the form of an article or report.

5. FEATURES OF EDUCATIONAL PROGRAMME IMPLEMENTATION

5.1. The Educational Programme is implemented without the use *of* e-learning / distance learning technologies.

5.2. The language of the Educational Programme implementation is English.

5.3. The Educational Programme is does not provide for education of people with

disabilities.

5.4. The Educational Programme is implemented by the Federal State Autonomous Educational Institution of Higher Education "Peoples' Friendship University of Russia."

5.5. The information on the planned introductory/advanced field internships and (or) research & development internships

Internship*	Internship location *(organisation name and location)*
Research practice	- agricultural holdings of Russian and foreign companies; - leading Russian and international companies in the development, production and sale of plant protection products; - experimental stations for plant protection;
Pre-diploma practice	- specialized research institutions; - system of FGU "Rosselkhoztsentr"; - customs service for phytosanitary supervision; - enterprises FGU plant quarantine; - representative offices of Russian and foreign insurance companies

6. CHARACTERISTICS OF EDUCATIONAL PROGRAMME GRADUATE'S PROFESSIONAL ACTIVITIES

6.1. The field(s) of professional activities of the Educational Programme graduate, where he/she can carry out his/her professional activities: organization and execution of work on the production of crop products.

6.2. The type(s) of professional activities tasks, which the graduate is trained to solve when mastering the Educational Programme: research, production-technological.

6.3. The list of generalised labour functions and labour functions which are related to the professional activities of the Educational Programme graduate and are taken into account in the course of its development.*

Code and title of occupational standard	Generalised labour functions			Labour functions		
	Code	Title	Qualification level	Title	Code	Qualification level (sublevel)
234 Agronomist	D	Plant production management	7	Carrying out research work in the field of agronomy in production conditions	D/03.7	7

* The wording of labour functions is taken from the relevant Occupational Standards.

8. REQUIREMENTS FOR EDUCATIONAL PROGRAMME OUTCOMES

8.1. Upon completion of the Educational Programme, the graduate is expected to acquire the following Generic Competences (GCs):

Code and descriptor of generic competence	Code and competence level indicator
GC-1 Able to search, critical analysis of problem situations based on a systematic approach, develop an action strategy	GC-1.1. Performs the search for the necessary information, its critical analysis and summarizes the results of the analysis to solve the problem; GC-1.2. Uses a systematic approach to solve assigned tasks; GC-1.3. Develops a strategy for achieving the set goal as a sequence of steps, anticipating the result of each of them and assessing their impact on the external environment of the planned activity and on the relationship between the participants in this activity.

Code and descriptor of generic competence	Code and competence level indicator
GC-2 Able to manage a project at all stages of its life cycle	GC-2.1. Develops the concept of the project within the framework of the identified problem, formulating the goal, objectives, relevance, significance (scientific, practical, methodological and other depending on the type of project), expected results and possible areas of their application; GC-2.2. Forms a schedule for the implementation of the project as a whole and a plan for monitoring its implementation, organizes and coordinates the work of project participants; GC-1.3. Suggests possible ways (algorithms) for putting the results of the project into practice (or implements it).
GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-3.1 Develops a cooperation strategy and, on its basis, organizes the work of the team to achieve the goal; GC-3.2 Plans team work, distributes tasks and delegates authority to team members, organizes discussion of different ideas and opinions
GC-4 Able to use modern communication technologies in the state language of the Russian Federation and foreign language(s) for academic and professional interaction	GC-4.1 Demonstrates the integrative skills required for writing, translating and editing various academic texts (abstracts, essays, reviews, articles, etc.); GC-4.2 Presents the results of academic and professional activities at various scientific events, including international ones; GC-4.3 Demonstrates the integrative skills necessary to participate effectively in academic and professional discussions.
GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-5.1 Demonstrates understanding of the characteristics of different cultures and nations; GC-5.2 Builds social interaction, taking into account the common and special of different cultures and religions.
GC-6 Able to identify and implement the priorities of their own activities and ways to improve it based on self-assessment	GC-6.1 Evaluates his resources and their limits (personal, situational, temporary), uses them optimally for the successful completion of the assigned task; GC-6.2 Plans a professional trajectory, taking into account the characteristics of both professional and other types of activity and the requirements of the labor market.
GC-7 Able to search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems, evaluate information, its reliability, build logical conclusions based on incoming information and data	GC-7.1 Evaluates information, its reliability, builds logical conclusions based on incoming information and data; GC-7.2 Has practical experience in searching, perceiving, storing, analyzing, transmitting information and data using digital tools, algorithms and application programs in order to solve the tasks.

8.2. Upon completion of the Educational Programme, the graduate is expected to acquire the following general professional competences (GPCs):

Code and descriptor of general professional competence	Code and competence level indicator
GPC-1 Able to solve the problems of developing the field of professional activity and (or) organization based on the analysis of the achievements of science and production	GPC-1.1 Demonstrates knowledge of the main methods for analyzing the achievements of science and production in agronomy; GPC-1.2 Uses methods for solving problems of the development of agronomy based on the search and analysis of modern achievements in science and production; GPC-1.3 Uses available technologies, including information and communication, to solve the problems of professional activities in agronomy.
GPC-2 Able to transfer professional knowledge, taking into account pedagogical methods	GPC-2.1 Knows modern educational technologies of vocational education (vocational training); GPC-2.2 Transfers professional knowledge in the field of agronomy, explains current problems and trends in its development, modern technologies for the production of crop products.
GPC-3 Able to use modern methods of solving problems in the development of new technologies in professional activities	GPC-3.1 Analyzes methods and methods for solving problems of developing new technologies in agronomy; GPC-3.2 Uses information resources, achievements of science and practice in the development of new technologies in agronomy.
GPC-4 Capable of conducting scientific research, analyzing results and preparing reports	GPC-4.1 Analyzes methods and methods for solving research problems; GPC-4.2 Uses information resources, scientific, experimental and instrumental base for research in agronomy; GPC-4.3 Formulates the results obtained in the course of solving research problems.
GPC-5 Able to carry out a feasibility study of projects in professional activities	GPC-5.1 Owns methods of economic analysis and accounting for project indicators in agronomy; GPC-5.2 Analyzes the main production and economic indicators of the project in agronomy; GPC-5.3 Develops proposals to improve project efficiency in agronomy.
GPC-6 Able to manage teams and organize production processes	GPC-6.1 Able to work with information systems and databases on personnel management issues; GPC-6.2 Defines the tasks of the personnel of the structural unit, based on the goals and strategy of the organization; GPC-6.3 Applies methods of managing interpersonal relationships, building teams, developing leadership and performance, identifying talents, measuring job satisfaction.
GPC-7 Able to use tools for working with large arrays of structured and unstructured information, use modern digital methods for processing, analyzing, interpreting and visualizing data in order to solve the tasks of professional and research activities in the field of agronomy	GPC-7.1 Owns tools for working with large arrays of structured and unstructured information; GPC-7.2 Uses modern digital methods for processing, analyzing, interpreting and visualizing data in order to solve the assigned tasks.

8.3. Upon completion of the Educational Programme, the graduate is expected to acquire the

following professional competences (PCs)* :

Code and descriptor of professional competence	Code and competence level indicator	Code and title of occupational standard for relevant PC
PC-1 Capable of collecting, processing, analyzing and systematizing scientific and technical information, domestic and foreign experience in the field of agronomy	PC-1.1 Carries out a critical analysis of the information received PC-1.2 Conducts information retrieval on improving technologies for growing and protecting crops, including using the Internet	
PC-2 Able to develop methods for conducting experiments, master new research methods	PC-2.1 Develops methods for conducting experiments PC-2.2 Applies modern types and methods of conducting observations and records in field experiments	
PC-3 Able to organize, conduct and analyze the results of experiments (field experiments)	PC-3.1 Owns modern methods of processing research results using methods of mathematical statistics PC-3.2 Organizes field experiments to assess the effectiveness of innovative technologies in production conditions	
PC-4 Able to create models of crop cultivation technologies, plant protection systems, varieties	PC-4.1 Applies modern methods of mathematical statistics to build models of various crop cultivation technologies, plant protection systems, varieties PC-4.2 Is able to highlight the main and secondary components of models in order to accelerate their development PC-4.3 Carries out the creation of plant protection systems for specific production conditions PC-4.4 Has the skills to organize plant protection work adapted to the soil and climatic conditions of the region PC-4.5 Works to protect plants from harmful objects PC-4.6 Develops and improves measures to protect plants from harmful objects	234 Agronomist
PC-5 Able to prepare scientific and technical reports, reviews and scientific publications based on the results of research	PC-5.1 Draws up a research program to study the effectiveness of agricultural practices PC-5.2 Uses the methods of mathematical statistics when processing data and preparing a report PC-5.3 Knows how to correctly compose the results of research in articles, textbooks and monographs	
PC-6 Able to consult on innovative technologies in agronomy	PC-6.1 Able to work with information systems and databases on the management of agricultural production PC-6.2 Is able to argue the need to use plant protection technologies for the accelerated development of agricultural enterprises	

Code and descriptor of professional competence	Code and competence level indicator	Code and title of occupational standard for relevant PC
PC-7 Able to carry out phytosanitary control at the state border in order to protect the territory of the Russian Federation from the penetration of quarantine and other dangerous pathogens and pests of plants, weeds	PC-7.1 Recognizes quarantine objects and identifies quarantine pests and pathogens PC-7.2 Conducts an examination of crops and crop products for the presence of quarantine objects	

9. MATRIX OF COMPETENCES that students acquire when mastering the Educational Program «Integrated Plant Protection» in the field of studies 34.04.04 Agronomy

Code	Courses/modules that form students' competences	GENERIC COMPETENCES						
		GC-1	GC-2	GC-3.	GC-4	GC-5	GC-6	GC-7
Block 1.	**Disciplines (modules)**							
B1.O	**Mandatory part**							
B1.O.01	**Core component**							
B1.O.01.01	Russian Language (for Foreign Students) / Русский язык (для иностранных студентов)				GC-4.1; GC-4.2; GC-4.3;	GC-5.1; GC-5.2		
B1.O.01.02	History and Methodology of Scientific Agronomy / История и методология научной агрономии	GC-1.2; GC-1.3				GC-5.1; GC-5.2	GC-6.1; GC-6.2;	
B1.O.01.03	Курсовая работа "History and Methodology of Scientific Agronomy" / Курсовая работа "История и методология научной агрономии"	GC-1.2; GC-1.3				GC-5.1; GC-5.2	GC-6.1; GC-6.2;	
B1.O.01.04	Information Technology / Информационные технологии	GC-1.1; GC-1.2;						GC-7.1; GC-7.2;
B1.O.01.05	Instrumental Methods of Research / Инструментальные методы исследований	GC-1.2;						
B1.O.01.06	Mathematical Modeling and Design / Математическое моделирование и проектирование							GC-7.1
B1.O.02	**Variable component**							
B1.O.02.01	Plant Immunity / Иммунитет растений	GC-1.2;						
B1.O.02.02	Курсовая работа "Plant Immunity" / Курсовая работа "Иммунитет растений"	GC-1.2;						
B1.O.02.03	Intergated Pest Management / Организация систем интегрированной защиты растений	GC-1.1; GC-1.3;	GC-2.1; GC-2.2; GC-2.3;					
B1.O.02.04	Курсовая работа "Intergated Pest Managemen" / Курсовая работа	GC-1.1; GC-1.3;	GC-2.1; GC-2.2; GC-2.3;					

Code	Courses/modules that form students' competences	GENERIC COMPETENCES						
		GC-1	GC-2	GC-3.	GC-4	GC-5	GC-6	GC-7
	"Организация систем интегрированной защиты растений"							
B1.О.02.05	Biological Methods in Plant protection / Биологический метод защиты растений	GPC-1.1; GPC-1.2;			GPC-4.2	GPC-5.1; GPC-5.2; GPC-5.3		
B1.О.02.06	Virology / Вирусология							
B1.О.02.07	Bacterial Diseases / Бактериальные болезни							
B1.О.02.08	Biotechnology in Plant Protection / Биотехнология в защите растений			GC-3.1; GC-3.2;				
B1.О.02.09	Plant Quarantine / Карантин растений							
B1.О.02.10	Plant Physiology / Физиология растений							
B1.V	**Part formed by participants in educational relations**							
B1.V.ED.01	**Elective disciplines**							
B1.V.ED.01.01	Manuscript Design / Работа с научной литературой	GC-1.1;						
B1.V.ED.01.02	Основы научной коммуникации				GC-4.2; GC-4.3			
B1.V.ED.02	**Elective disciplines**							
B1.V.ED.02.01	Weed Biology and Management / Биология сорной растительности							
B1.V.ED.02.02	Защита растений в органическом земледелии		GC-2.1; GC-2.2; GC-2.3;					
B1.V.ED.03	**Elective disciplines**							
B1.V.ED.03.01	Molecular Methods of Diagnostics / Молекулярные методы диагностики фитопатогенов							
B1.V.ED.03.02	Nematodes / Нематодные болезни							
B1.V.ED.04	**Elective disciplines**							
B1.V.ED.04.01	Statistical Design / Статистический анализ	GC-1.1; GC-						

Code	Courses/modules that form students' competences	GENERIC COMPETENCES						
		GC-1	GC-2	GC-3.	GC-4	GC-5	GC-6	GC-7
		1.3;						
B1.V.ED.04.02	Toxicology / Токсикология	GC-1.1; GC-1.3;						
Block 2.	**Practice**							
B2.O	**Mandatory part**							
B2.O.01	**Core component**							
B2.O.01.01(N)	Research Work / Научно-исследовательская работа	GC-1.1; GC-1.2; GC-1.3;	GC-2.1; GC-2.2; GC-2.3;				GC-6.1; GC-6.2;	GC-7.1; GC-7.2;
B2.O.02	**Вариативная компонента**							
B2.O.02.01(P)	Research Practice / Научно-исследовательская практика	GC-1.1; GC-1.2; GC-1.3;	GC-2.1; GC-2.2; GC-2.3;	GC-3.1; GC-3.2;		GC-5.1; GC-5.2;	GC-6.1; GC-6.2;	GC-7.1; GC-7.2;
B2.V	**Part formed by participants in educational relations**							
Б2.V.01(Pd)	Pre-Diploma Practice / Преддипломная практика	GC-1.1; GC-1.2; GC-1.3;	GC-2.1; GC-2.2; GC-2.3;		GC-4.2; GC-4.3;			
Block 3.	**Final State Examination**	GC-1.1; GC-1.2; GC-1.3;	GC-2.1; GC-2.2; GC-2.3;	GC-3.1; GC-3.2;	GC-4.1; GC-4.2; GC-4.3;	GC-5.1; GC-5.2;	GC-6.1; GC-6.2;	GC-7.1; GC-7.2;

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GPC-1	GPC-2	GPC-3.	GPC-4	GPC-5	GPC-6	GPC-7
Block 1.	**Disciplines (modules)**							
B1.O	**Mandatory part**							
B1.O.01	**Core component**							
B1.O.01.01	Russian Language (for Foreign Students) / Русский язык (для иностранных студентов)							
B1.O.01.02	History and Methodology of Scientific Agronomy / История и методология		GPC-2.1; GPC-2.2;					

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GPC-1	GPC-2	GPC-3.	GPC-4	GPC-5	GPC-6	GPC-7
	научной агрономии							
B1.O.01.03	Курсовая работа "History and Methodology of Scientific Agronomy" / Курсовая работа "История и методология научной агрономии"		GPC-2.1; GPC-2.2;					
B1.O.01.04	Information Technology / Информационные технологии	GPC-1.3;		GPC-3.2;				GPC-7.1; GPC-7.2;
B1.O.01.05	Instrumental Methods of Research / Инструментальные методы исследований	GPC-1.1		GPC-3.1	GPC-4.1			GPC-7.2
B1.O.01.06	Mathematical Modeling and Design / Математическое моделирование и проектирование	GPC-1.1			GPC-4.1			
B1.O.02	**Variable component**							
B1.O.02.01	Plant Immunity / Иммунитет растений	GPC-1.2;			GPC-4.2;			
B1.O.02.02	Курсовая работа "Plant Immunity" / Курсовая работа "Иммунитет растений"	GPC-1.2;			GPC-4.2;			
B1.O.02.03	Intergated Pest Management / Организация систем интегрированной защиты растений	GPC-1.2; GPC-1.3;		GPC-3.1;	GPC-4.2; GPC-4.3;	GPC-5.1; GPC-5.2; GPC-5.3;		
B1.O.02.04	Курсовая работа "Intergated Pest Managemen" / Курсовая работа "Организация систем интегрированной защиты растений"	GPC-1.2; GPC-1.3;		GPC-3.1;	GPC-4.2; GPC-4.3;	GPC-5.1; GPC-5.2; GPC-5.3;		
B1.O.02.05	Biological Methods in Plant protection / Биологический метод защиты растений							
B1.O.02.06	Virology / Вирусология	GPC-1.2;			GPC-4.2; GPC-4.3;;			
B1.O.02.07	Bacterial Diseases / Бактериальные болезни				GPC-1.2; GPC-4.2;			
B1.O.02.08	Biotechnology in Plant Protection / Биотехнология в защите растений					GPC-5.1; GPC-5.2;	GPC-6.1; GPC-6.2;	

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GPC-1	GPC-2	GPC-3.	GPC-4	GPC-5	GPC-6	GPC-7
							GPC-6.3	
B1.O.02.09	Plant Quarantine / Карантин растений	GPC-1.2; GPC-1.3;			GPC-4.2			
B1.O.02.10	Plant Physiology / Физиология растений			GC-3.1; GC-3.2;		GPC-5.1; GPC-5.2;	GPC-6.1; GPC-6.2; GPC-6.3	
B1.V	**Part formed by participants in educational relations**							
B1.V.ED.01	**Elective disciplines**							
B1.V.ED.01.01	Manuscript Design / Работа с научной литературой				GPC-4.3;			
B1.V.ED.01.02	Основы научной коммуникации		GPC-2.1; GPC-2.2		GPC-4.3;			
B1.V.ED.02	**Elective disciplines**							
B1.V.ED.02.01	Weed Biology and Management / Биология сорной растительности	GPC-1.2;			GPC-4.2;			
B1.V.ED.02.02	Защита растений в органическом земледелии	GPC-1.1; GPC-1.2;			GPC-4.2;	GPC-5.1; GPC-5.2; GPC-5.3;		
B1.V.ED.03	**Elective disciplines**							
B1.V.ED.03.01	Molecular Methods of Diagnostics / Молекулярные методы диагностики фитопатогенов	GPC-1.1; GPC-1.2;			GPC-4.2; GPC-4.3;			
B1.V.ED.03.02	Nematodes / Нематодные болезни	GPC-1.2;			GPC-4.2;			
B1.V.ED.04	**Elective disciplines**							
B1.V.ED.04.01	Statistical Design / Статистический анализ	GPC-1.1; GPC-1.2;			GPC-4.2; GPC-4.3;			
B1.V.ED.04.02	Toxicology / Токсикология	GPC-1.1; GPC-1.2;			GPC-4.2; GPC-4.3;			
Block 2.	**Practice**							

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GPC-1	GPC-2	GPC-3.	GPC-4	GPC-5	GPC-6	GPC-7
B2.O	**Mandatory part**							
B2.O.01	**Core component**							
B2.O.01.01(N)	Research Work / Научно-исследовательская работа	GPC-1.1; GPC-1.2; GPC-1.3;		GPC-3.1; GPC-3.2	GPC-4.1; GPC-4.2; GPC-4.3;			GPC-7.1; GPC-7.2;
B2.O.02	**Вариативная компонента**							
B2.O.02.01(P)	Research Practice / Научно-исследовательская практика	GPC-1.1; GPC-1.2; GPC-1.3;		GPC-3.1; GPC-3.2;	GPC-4.1; GPC-4.2; GPC-4.3;		GPC-6.1; GPC-6.2; GPC-6.3;	GPC-7.1; GPC-7.2;
B2.V	**Part formed by participants in educational relations**							
Б2.V.01(Pd)	Pre-Diploma Practice / Преддипломная практика				GPC-4.3;			
Block 3.	**Final State Examination**	GPC-1.1; GPC-1.2; GPC-1.3;	GPC-2.1; GPC-2.2;	GPC-3.1; GPC-3.2;	GPC-4.1; GPC-4.2; GPC-4.3;	GPC-5.1; GPC-5.2; GPC-5.3;	GPC-6.1; GPC-6.2; GPC-6.3;	GPC-7.1; GPC-7.2;

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES						
		PC-1	PC-2	PC-3.	PC-4	PC-5	PC-6	PC-7
Block 1.	**Disciplines (modules)**							
B1.O	**Mandatory part**							
B1.O.01	**Core component**							
B1.O.01.01	Russian Language (for Foreign Students) / Русский язык (для иностранных студентов)							
B1.O.01.02	History and Methodology of Scientific Agronomy / История и методология научной агрономии	PC-1.1;				PC-5.1; PC-5.3		

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES						
		PC-1	PC-2	PC-3.	PC-4	PC-5	PC-6	PC-7
B1.O.01.03	Курсовая работа "History and Methodology of Scientific Agronomy" / Курсовая работа "История и методология научной агрономии"	PC-1.1;				PC-5.1; PC-5.3		
B1.O.01.04	Information Technology / Информационные технологии	PC-1.2;					PC-6.1	
B1.O.01.05	Instrumental Methods of Research / Инструментальные методы исследований		PC-2.2					
B1.O.01.06	Mathematical Modeling and Design / Математическое моделирование и проектирование			PC-3.1	PC-4.1	PC-5.2		
B1.O.02	**Variable component**							
B1.O.02.01	Plant Immunity / Иммунитет растений	PC-1.1;	PC-2.1;		PC-4.2; PC-4.5; PC-4.6			
B1.O.02.02	Курсовая работа "Plant Immunity" / Курсовая работа "Иммунитет растений"	PC-1.1;	PC-2.1;		PC-4.2; PC-4.5; PC-4.6			
B1.O.02.03	Intergated Pest Management / Организация систем интегрированной защиты растений	PC-1.1;	PC-2.1; PC-2.2;	PC-3.2;	PC-4.2; PC-4.3; PC-4.4;		PC-6.2	
B1.O.02.04	Курсовая работа "Intergated Pest Managemen" / Курсовая работа "Организация систем интегрированной защиты растений"	PC-1.1;	PC-2.1; PC-2.2;	PC-3.2;	PC-4.2; PC-4.3; PC-4.4;		PC-6.2	
B1.O.02.05	Biological Methods in Plant protection / Биологический метод защиты растений		PC-2.1; PC-2.2	PC-3.2;	PC-4.2; PC-4.5; PC-4.6		PC-6.2	
B1.O.02.06	Virology / Вирусология				PC-4.5; PC-4.6			PC-7.1; PC-7.2
B1.O.02.07	Bacterial Diseases / Бактериальные болезни				PC-4.5; PC-4.6;			PC-7.1; PC-7.2
B1.O.02.08	Biotechnology in Plant Protection / Биотехнология в защите растений							
B1.O.02.09	Plant Quarantine / Карантин растений	PC-1.1	PC-2.1					PC-7.1; PC-

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES						
		PC-1	PC-2	PC-3.	PC-4	PC-5	PC-6	PC-7
								7.2
B1.O.02.10	Plant Physiology / Физиология растений							
B1.V	**Part formed by participants in educational relations**							
B1.V.ED.01	**Elective disciplines**							
B1.V.ED.01.01	Manuscript Design / Работа с научной литературой			PC-5.3				
B1.V.ED.01.02	Основы научной коммуникации					PC-5.3		
B1.V.ED.02	**Elective disciplines**							
B1.V.ED.02.01	Weed Biology and Management / Биология сорной растительности				PC-4.5; PC-4.6			
B1.V.ED.02.02	Защита растений в органическом земледелии		PC-2.2;		PC-4.3			
B1.V.ED.03	**Elective disciplines**							
B1.V.ED.03.01	Molecular Methods of Diagnostics / Молекулярные методы диагностики фитопатогенов		PC-2.1;			PC-5.1;		PC-7.1; PC-7.2
B1.V.ED.03.02	Nematodes / Нематодные болезни				PC-4.5; PC-4.6;			PC-7.1; PC-7.2
B1.V.ED.04	**Elective disciplines**							
B1.V.ED.04.01	Statistical Design / Статистический анализ	PC-1.1;			PC-4.5; PC-4.6			
B1.V.ED.04.02	Toxicology / Токсикология							
Block 2.	**Practice**							
B2.O	**Mandatory part**							
B2.O.01	**Core component**							
B2.O.01.01(N)	Research Work / Научно-исследовательская работа	PC-1.1; PC-1.2;	PC-2.1; PC-2.2;	PC-3.2;		PC-5.1; PC-5.2		
B2.O.02	**Вариативная компонента**							
B2.O.02.01(P)	Research Practice / Научно-	PC-1.1; PC-	PC-2.1; PC-	PC-3.2	PC-4.1; PC-	PC-5.1;	PC-6.1; PC-	

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES						
		PC-1	PC-2	PC-3.	PC-4	PC-5	PC-6	PC-7
	исследовательская практика	1.2;	2.2		4.2; PC-4.3; PC-4.4; PC-4.5; PC-4.6		6.2	
B2.V	**Part formed by participants in educational relations**							
Б2.V.01(Pd)	Pre-Diploma Practice / Преддипломная практика	PC-1.1; PC-1.2;				PC-5.2; PC-5.3		
Block 3.	**Final State Examination**	PC-1.1; PC-1.2;	PC-2.1; PC-2.2;	PC-3.1; PC-3.2;	PC-4.1; PC-4.2; PC-4.3; PC-4.4; PC-4.5; PC-4.6;	PC-5.1; PC-5.2; PC-5.3;	PC-6.1; PC-6.2;	PC-7.1; PC-7.2