

Information on educational programs of undergraduate (5B081100 Protection and Quarantine of Plants) and graduate (6M081100 - "5B081100 Protection and Quarantine of Plants ")

The objective of EP Baccalaureate is the preparation, based on moral, aesthetic, professional and scientific values, competitive and demand in the agricultural sector in the world's scientific and educational space of the new formation in the field of plant protection and quarantine.

The objective of EP Magistracy is training with a high level of professional culture, capable to formulate and solve the scientific and practical problems, engaging in research, management, teaching.

Contents of bachelor's and master set of state educational standards are SES RK 05/04/19 - 2011. Higher Education. Baccalaureate. Basic provisions SES RK 5.04.033 - 2011. Postgraduate education. Master's. Basic provisions.

Contingent learning in bachelor in 2013-2014 year is 384 people, including 184 in the official language training 200 people in Russian. At the end of the 2012-2013 academic year the department received a license for postgraduate training profession in the plant protection and quarantine. For 2013-2014 academic year was done the first set of the magistracy and the number of students on the state grant is 3 people, including - 2 in the official language, one in Russian.

Educational environment in which there is a formation of specialists in the protection and plant quarantine is the relationship conditions for the formation of personality , capable of active creativity in various areas of basic and applied sciences . Its foundation is 55 - year tradition and image of S.Seifullin Kazakh Agrotechnical University, modern technologies, developing training system electives, elective courses , intellectual competitions at various levels of support for talented students; social support for students, extracurricular activities .

Department of Plant Protection and Quarantine , the preparation and production of bachelors and masters specialty 081100 - " Plant Protection and Quarantine " is the new chair, created in January 2013 , but the specialty items were taught back in Tselinograd Agricultural Institute and has a high scientific and pedagogical human resources. At the beginning of the 2013-2014 academic year, the number of faculty and teaching and support staff of 19 employees, of whom 16 TS . Currently the department has one professor , 3 associate professors, 6 senior lecturers, 6 assistants , 1 main laboratory technician and 2 laboratory technician . A lecturer of the department is the owner of the state grant "The best teacher of the university ." The average age of TS is 45 years. Concurrently, work practices - 1 PhD, Associate Professor.

The department has a contract with specialized research institutes, SRI on the organization and practical base joint cooperation : Ltd "KazRU Execution of Plant Protection and Quarantine , NPC im.A.I.Barayeva, LP «KazRU of rice ", LLP" KazRU of cotton "; SPC " Biotechnology " , OIG APK MoA , SE " RMTsFDiP " PG "Republican quarantine laboratory , " RGP " Phytosanitary " , "Agro Phoenix " , LLP " Yesil Agro" .

For oriented towards professional competence training , the Department provided the-spot training in specialized institutes , centers , inviting leading scholars to give lectures to senior students , for master's .

Classrooms are equipped with chair modern educational technology ; 5 projectors , 1-interactive whiteboard are operated in the research laboratory with modern equipment and instruments , one of innovative scientific center " Phyto-sanitary monitoring , protection and plant quarantine " , conducts research within the grant funding budgetary programs MES and the Ministry of Agriculture (3) and on a contractual basis (1) , totaling more than 26 million tenge. The results of research are included in the learning process during the lectures and workshops.

Over the last years, in accordance with the requirements of the loan program was developed and published teaching literature on specialty disciplines, both in print and in electronic form.

With the implementation of educational programs at the Department of special attention paid to the involvement of students in research: implementation of software projects and dissertations, participation in Republican Subject Olympiad and University Republican contests and student research papers, participation in national and international scientific conferences of young scientists and students involved in work of the scientific circle "Phyto-sanitary" and etc.

Students participated in external and internal academic mobility : Hungary KazNAU .

In 2014, the first issue is scheduled bachelors ETA specialty " Protection and Quarantine of Plants."

Thus, educational programs for bachelors and masters for Soil Science and Agricultural industries are focused on creating and improving educational environment conducive to the formation of a self-sustaining and self-fulfilling personality based on the introduction of competence-based approach to education and the educational process.

IV Contents of the learning program "Phytosanitary safety" speciality 5B081100-Plant Protection and Quarantine, 2013-2017y.

cycle/ component	discipline code	Discipline name	Kazakhstan credits	ECTS	semester	Control on				Hours						Distribution at courses and semester																								
						exams	offsets	academic year	assignments	In total	Classroom works, from them				Individual work		1 course		2 course		3 course		4 course																	
											classroom works	lecture	laboratory	practical	student work with the teacher	individual student work	1 sem	2 sem	3 sem	4 sem	5 sem	6 sem	7 sem	8 sem																
																	weeks in a semester								15	15	15	15	15	15	15									
Module 1 - Social-political disciplines - 11 credits																																								
CD/MC	IK 1101	History of	3	5	1					135	67,5	15		30	22,5	67,5	3																							
CD/MC	Fil 2111	Philosophy	3	5	4					135	82,5	30		30	22,5	52,5				3																				
CD/MC	Soc 1104	Sociology	2	3	1					90	45	15		15	15	45	2																							
CD/MC	Pol 2110	Political science	2	3	4					90	60	15		30	15	30				2																				
CD/MC	Rel 1101	Religion	1	2	2					45	30	15			7,5	15		1																						
Module 2 - - 12 credits																																								
CD/MC	K(R)Ya 1106	Kazakh (russian) language	6	10	1,2					270	135			90	45	135	3	3																						
CD/MC	IYa 1108	Foreign language	6	10	1,2					270	135			90	45	135	3	3																						
Module 3 - General education disciplines - 11 credits																																								
CD/MC	Inf 1102	Informatics	3	5	2					135	67,5	15		30	22,5	67,5		3																						
CD/MC	EUR 1105	Ecology and sustainable development	2	3	1					90	60	15		30	15	30	2																							
CD/MC	OBJ 1103	Basics of life safety	2	3	1					90	60	15		30	15	30	2																							

CD/MC	OET 2107	Foundations of the economic theory	2	3	2					90	60	15		30	15	30		2							
CD/MC	OP 2109	Foundations of Law	2	3	3					90	60	15		30	15	30		2							
Module 4 - Professional Languages -4 credits																									
BD/MC	PK (R) Ya 3201	Professional kazkh (russian) language	2	3	5					90	60	15		30	15	30							2		
BD/MC	P-oIYa 3202	Professionally-oriented foreign language	2	3	5					90	60	15		30	15	30							2		
Module 5 - - 2 credits																									
BD/MC	OT 2208	Labor protection	2	3	3					90	45	15		15	15	45		2							
cycle/ component	discipline code	Discipline name	Kazakhstan credits	ECTS	semester	Control on semester				Hours							Distribution at courses and semester								
						exams	offsets	academic year projects	assignments	In total	Classroom works, from them				Individual work			1 course		2 course		3 course		4 course	
											classroom works	lecture	laboratory	practical	student work with the teacher	individual student work	1 sem	2 sem	3 sem	4 sem	5 sem	6 sem	7 sem	8 sem	
Module 6 -Chemistry (part 1) - 3 credits																									
BD/MC	NOH 1203	Inorganic and organic chemistry	3	5	2					135	82,5	30	30		22,5	52,5		3							
Module 6 -Chemistry (part 2) - 3 credits																									
BD/SC	AFH 2201	Analytical, physical and colloid chemistry	3	5	3					135	82,5	30	30		22,5	52,5		3							
Module 7 -Biological - 7 credits																									

BD/MC	Biol 1204	Biology	3	5	1				135	82,5	30	30		22,5	52,5	3							
BD/SC	FiR 1202	Physiology of plants	2	3	2				90	60	15	30		15	30		2						
BD/SC	Mik 1203	Microbiology	2	3	1				90	60	15	30		15	30	2							
Module 8 -Meteorological-3 credits																							
BD/S C	Agr 1204	Agrometeorological	3	5	2				135	82,5	30	30		22,5	52,5		3						
Module 9 - Soils and agronomic chemistry -6 credits																							
BD/M C	Poch 2205	Soil science	3	5	3				135	82,5	30	30		22,5	52,5			3					
BD/S C	Agr 2205	Agrochemistry	3	5	4				135	82,5	30	30		22,5	52,5				3				
Module 10 - Agriculture and fight against weeds - 5 credits																							
BD/S C	Zem 2206	Agriculture	2	3	3				90	60	15	30		15	30			2					
PD/S C	Ger 2301	Herbology	3	5	4				135	82,5	30	30		22,5	52,5				3				
Module 11 -Crop production -7 credits																							
BD/S C	Ras 2207	Plant growing science	4	7	3,4				180	90	30	60		30	90			2	2				
BD/S C	PIOv 2208	Fruit-and-vegetable growing science	3	5	3				135	82,5	30	30		22,5	52,5			3					
Module 12-Plant Diseases(part 1) - 3 credits																							
BD/M C	OF 2207	General phytopathology	3	5	4				135	82,5	30	30		22,5	52,5				3				
Module 12-Plant Diseases (part 2) - 5 credits																							
BD/SC	SE 2209	Agricultural	3	5	5				135	82,5	30	30		22,5	52,5							3	

PD/SC	KOMB 3308	Quarantine organisms and their control measures	3	5	6				135	82,5	30	30		22,5	52,5						3								
PD/SC	MDVKO 3309	Methods for detection of quarantine organisms	2	3	6				90	60	15	30		15	30						2								
Module 17- Methods of plant protection- 5 credits																													
PD/MC	HZR 3304	Chemical plant protection	3	5	6				135	82,5	30	30		22,5	52,5						3								
cycle/ component	discipline code	Discipline name	Kazakhstan credits	ECTS	semester	Control on				Hours						Distribution at courses and semester													
						exams	offsets	academic year	assignments	In total	Classroom works, from them				individual work		1 course		2 course		3course		4 course						
											classroom works	lecture	laboratory	practical	student work with the	individual student work	1 sem	2 sem	3 sem	4 sem	5 sem	6 sem	7 sem	8 sem					
																						weeks in a semester							
																15	15	15	15	15	15	15	15	15	15				
PD/MC	BZR 3305	Biological plant protection	2	3	6				90	60	15	30		15	30						2								
Module 18 Biogenetic plant resistance- 9 credits																													
BD/SC	Gen 4210	Genetics	2	3	6				90	60	15	30		15	30						2								
BD/SC	BRSR 4211	Biotechnology in crop and plant	3	5	7				135	82,5	30	30		22,5	52,5						3								
BD/SC	SSSK 4212	Breeding and seed production of agricultural crops	2	3	7				90	60	15	30		15	30						2								
PD/SC	IR 4310	Plant immunity	2	3	7				90	60	15	30		15	30						2								
Module 19- Fundamentals of Economics and Agribusiness- 5 credits																													

cycle/ component	Discipline code	Discipline name	Kazakhstan credits	ECTS	semester	Control on				Hours						Distribution at courses and semester								
						exams	offsets	academic year	assignments	in total	Classroom works, from them						1 course		2 course		3 course		4 course	
											classroom work	lecture	laboratory	practical	CPCII	CPC	1 sem	2 sem	3 sem	4 sem	5 sem	6 sem	7 sem	8 sem
																	weeks in a semester							
Additional types of learning																								
Mandatory component																								
	FK 1101-2101	Physical culture	8				1,2,3,4		360	180			120	60	180	2	2	2	2					
		Professional Practice	14	15			2,4,6		420								4		6		4			
		In total	22						780	180			120	60	180		6		6		4			
		Final certification	3	10	8				270						270						3			
		Total curriculum	155	237					6900	3105	975	990	660	1043	2708	22	25	19	24	18	22	18	3	
		Professional Practice, including to						Credits	Semester	Weeks	Hours			Final state certification, including to:	Semester	credits	weeks	hours						
		Educational						4	2	2	60			State exams	8	1	2	105						
		Technology Practice						6	4	4	90			Writing and defense of the diploma project	8	2	4	210						
		Manufacturing practice						4	6 и 7	10	300													
		In total						14			450				Итого	3	6	315						

WTP graduate majoring 6M081100 " Plants Protection and Quarantine " for 2013 and 2015.

№	Code of discipline	Name of discipline	Credits	Control by semester			Size hours						Volume of studying hours			
				Exams	Course work	Report on the practice	In total	Classroom	Including .		Independent work of the student	Independent work of the master	Semester			
									Lectures	Laboratories			1	2	3	4
								Number of weeks in a semester				15	15	15	21	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<u>BD-1</u>	Basic discipline, in all		20				900	300	150	150	135	465	8	7	5	
<u>MC1.1</u>	Mandatory component		8				360	120	45	75	60	180	8			
Module 1 - Public discipline - 4 credits																
<u>BD 01</u>	<u>IFN 5201</u>	History and Philosophy of Science	2	1			90	30	15	15	15	45	1/1			
<u>BD 02</u>	<u>IYA 5202</u>	Foreign language (professional) *	2	1			90	30	-	30	15	45	0/2			
Module 2 - Teaching Discipline - 4 credits																
<u>BD 03</u>	<u>Ped 6203</u>	Pedagogy	2	1			90	30	15	15	15	45	1/1			
<u>BD 04</u>	<u>Psi 6204</u>	Psychology	2	1			90	30	15	15	15	45	1/1			
	Selection component		12				540	180	105	75	75	285		7	5	
Module - 3 Innovations and research in protection and plant quarantine - 4 credits (2 credits *)																
<u>SC 01</u>	<u>MODNIR5205</u>	Methods of experimental work in scientific research	2	2			90	30	15	15	15	45		1/ 1		
<u>SC 02</u>	<u>IMONIZKR 5206</u>	Methods of research in the plant protection and quarantine	2	2			90	30	15	15	15	45		1/ 1		
Module 4 - Biotechnology in Plant Protection - 3 credits (2 credits *)																

<u>SC 02</u>	<u>BMZKR 5207</u>	Biotechnological methods of protection and plant quarantine	3	2			135	45	15	15	15	75			2/1	
Module 5 Modern technologies of field crops cultivation - 2 credits																
<u>SC 03</u>	<u>STWSK 5208</u>	Modern technologies of cultivation of agricultural crops	2	3			90	30	15	15	15	45				1/1
Module 6 External factors in plant protection - 3 credits (1 credit *)																
<u>SC 04</u> <u>SD-1</u>	<u>BK5209</u>	bioclimatology	3	3			135	45	30	15	15	75				2/1
		Specialized disciplines, in total	22				990	330	195	135	135	525	4	8	10	
<u>MC 2.1</u>		Compulsory component	2				90	30	15	15	15	45				
Module 7 - Phytosanitary monitoring - 2 credits																
<u>MC 2.1</u>	<u>FMOVO5301</u>	Phytosanitary monitoring of dangerous pests	2	1			90	30	15	15	15	45	1 / 1			
<u>SC 2.2</u>		Elective component	20				900	300	180	120	120	480				
Module 8 - Plant Protection System - 3 credits																
<u>SC 2.1</u>	<u>ISZRWO5302</u>	Integrated system for protecting plants from pests	3	2			135	45	30	15	15	75			2 / 1	
Module 9 - Phytosanitary situation cenoses - 4 credits																
<u>SC 2.2</u>	<u>FOR 5303</u>	Phyto-sanitary optimization of crop production in	2	3			90	30	15	15	15	45				1/1
<u>SC 2.3</u>	<u>FOPO 5304</u>	Phyto-sanitary optimization of a fruit and vegetable growing	2	3			90	30	15	15	15	45				1 / 1
Module 10 - Plant quarantine -6 credits																
<u>SC 2.4</u>	<u>WKR 5305</u>	plant quarantine	3	3			135	45	30	15	15	75				2/1
<u>SC 2.5</u>	<u>WKR 5306</u>	Internal plant quarantine	3	2			135	45	30	15	15	75			2/1	

Module 11 - Methods of Plant Protection and Quarantine - 4 credits																
<u>SC 2.6</u>	<u>STZR 5307</u>	Modern technology Plant Protection and Quarantine	2	1			90	30	15	15	15	45	1/1			
<u>SC 2.7</u>	<u>MMZR 5308</u>	Microbiological method in plant protection	2	2			90	30	15	15	15	45		1/1		
Module 12 - Financial support for Plant Protection and Quarantine - 3 credits																
<u>SC 2.8</u>	<u>GSOZKR 5309</u>	State system for ensuring the plant protection and quarantine	3	3			135	45	30	15	15	75			2/ 1	
In total			42				1890	630	345	285	270	990	12	15	15	
Research work			7	1,2,3,4			840	45				420	*	*	*	*
Practice	Educational		3	3			90*	45				45			3 wk.	*
	research		3	2,4			480*	45				315		8 wk.	4 wk	*
Final state certification	1. Comprehensive Exam		1	4			150	60				360				*
	1. Decoration and protection of backbone's Dissertation		3	4			150	60								
In total			59				3600	885			270	2445	12	15	15	*