

Total block A+B+C+discipline D1		560																																																		
obligatory subjects from the discipline of chemical sciences - D2																																																				
1	Ph.D. seminar	120	0	0	0	0	120							15	ZO					15	ZO					15	ZO					15	ZO					15	ZO					15	ZO							
2	Advanced aspects of chemistry in relation to various specialties	60	60	0	0	0	0	10							ZO	10					ZO	10					ZO	10					ZO	10					ZO													
3	Participation in the Institutes' reporting session	15	0	0	0	0	15																																													
4	Statistical methods in chemical sciences	15	0	0	0	15	0																																													
Razem D2		210	60	0	0	15	135	10	0	0	0	15	0	10	0	0	0	0	0	20	0	10	0	0	0	15	15	0	10	0	0	0	0	20	0	10	0	0	0	0	15	0	0	0	0	0	15	0				
Total block A+B+C+discipline D2		500																																																		
obligatory subjects from the discipline of physical sciences - D3																																																				
1	Ph.D. seminar	120	0	0	0	0	120							15	ZO					15	ZO					15	ZO					15	ZO					15	ZO					15	ZO							
2	Specialist lecture*	90	90	0	0	0	0	30							ZO						30						ZO																									
3	Disciplinary seminar	120	0	0	0	0	120							15	ZO					15	ZO					15	ZO																									
Razem D3		330	90	0	0	0	240	30	0	0	0	30	0	0	0	0	0	0	0	30	0	30	0	0	0	0	30	0	0	0	0	0	0	0	0	30	0	30	0	0	0	0	0	30	0	0	0	0	30	0		
Total block A+B+C+discipline D3		620																																																		
* examples of lecture titles: 1. Experimental methods in nuclear physics; 2. Advanced numerical methods; 3. Introduction to cosmology and theory of gravity; 4. Quantum mechanics II; 5. Experimental methods of solid state physics; 6. Nuclear spectroscopy methods; 7. Elements of quantum field theory in path integral formulation																																																				
obligatory subjects from the discipline of Earth and environmental science - D4																																																				
1	Ph.D. seminar	120	0	0	0	0	120							15	ZO					15	ZO					15	ZO					15	ZO					15	ZO					15	ZO							
2	Disciplinary seminar	32	0	0	0	0	32							4	ZO					4	ZO					4	ZO					4	ZO					4	ZO					4	ZO							
3	Seminar - Earth and environmental sciences	30	0	0	0	0	30							15	ZO					15	ZO																															
4	Optional disciplinary subject **	45	45												3x15=45										ZO																											
Total D4		227	0	0	0	0	182	0	0	0	0	34	0	0	0	0	0	0	0	34	0	0	0	0	0	19	0	0	0	0	0	0	0	0	19	0	0	0	0	0	19	0	0	0	0	0	19	0				
Total block A+B+C+discipline D4		517																																																		
** course titles: Spatial analyzes in Earth and environmental sciences; Modeling of processes in Earth and environment sciences; Electronic sources of information in earth and environmental sciences; Techniques of obtaining spatial data; Programming in Earth and environmental sciences Applications; Creating and using databases; Statistical methods in Earth and environmental sciences (after starting education, the doctoral student declares the choice of at least 3 subjects in a total at least 45 hours). The list of subjects may be extended to include subjects approved by the School Council.																																																				
obligatory subjects from the discipline of Agriculture and Horticulture - D5																																																				
1	Current problems of agriculture	30	30	0	0	0	0	15						ZO	15																																					
2	Environmental microbiology with elements of biotechnology	30	30	0	0	0	0																																													
3	Ph.D. seminar	120	0	0	0	0	120							15	ZO					15	ZO					15	ZO																									
4	Dysciplinary seminar	30	0	0	0	0	30							5	ZO					5	ZO					5	ZO																									
5	Statistical methods in scientific research	30	0	0	0	0	30							30	ZO																																					
Total D5		240	60	0	0	0	180	15	0	0	0	50	0	15	0	0	0	0	20	0	30	0	0	0	0	20	0	0	0	0	0	0	0	20	0	0	0	0	0	20	0	0	0	0	0	20	0	0	0	0	15	0
Total block A+B+C+discipline D5		530																																																		

Symbols: L - lecture, CA - classes, LB - laboratory classes and practices, KW - seminar, SM - seminar, E - exam, ZO - pass with grade