

Description of Modules

№	Module name	Academic Credits	Number and name of discipline	Academic credits of discipline	Cycle/ Component of the Discipline
1	ISE-1 Integration of science and education	16	ISE 501 History and philosophy of science	4	CC/UC
			ISE 502 Foreign language (professional)	4	CC/UC
			ISE 503 Higher School Pedagogy	4	CC/UC
			ISE 504 Psychology of management	4	CC/UC
2	AMCh-2 Actual aspects modern chemistry	15	APMCh 501/1 Selected chapters in inorganic chemistry	5	MC/UC
			APMCh 501/2 Modern advances in inorganic chemistry		
			APMCh 502/1 Applied foundations of modern organic chemistry	5	MC/UC
			APMCh 502/2 Heterocyclic compounds		
			APMCh 503 /1 Analytical chemistry of biological objects and drugs	5	MC/UC
			APMCh 503 /2 Modern analytical chemistry		
3	MDCh-3 The main directions of modern chemistry	30	MDCh 501 Theory and problems of physical chemistry	5	MC/UC
			MDCh 502/1 Methods of IR, NMR, mass spectroscopic studies	5	MC/UC
			MDCh 502/2 Modern methods of physical and chemical analyzes		
			MDCh 503/1 Methods for the synthesis of inorganic compounds	5	MC/UC
			MDCh 503/2 Nanotechnology		
			MDCh 504 /1 Wasteless technologies and ecology of the environment	5	MC/UC
MDCh 504 /1 Modern advances in polymer synthesis					

			MDCh 605 /1 Methods for the study of inorganic substances and materials	5	MC/UC
			MDCh 605 /2 Computer materials science		
			MDCh 606/ 1 Theoretical and applied electrochemistry	5	MC/UC
			MDCh 606/2 Modern petrochemical technologies		
4	BSR-4 Basic of Research Methodology	13	BSR 601/1 Synthesis and identification of organic compounds	6	MC/UC
			BSR 601/1 Modern problems of organic chemistry		
			BSR 602 Methodology and technology of scientific research	7	CC/UC
5	RW-5 Research work	38	Undergraduate research work, including internships and the implementation of a Master's thesis (MRW)	38	RW
			Methods of scientific research		
			Academic writing		
6	FE Final certification	8	FE 6.01 Registration and defense of the Master's thesis (RDMT)	8	FC
	TOTAL:	120		120	