

2. CONTENT OF THE EDUCATIONAL PROGRAM

№	Code and name of modules	Code and name of modules	№	Code and name of the discipline	Acad.cred it of discipline	Цикл/ КОМПОНЕНТ
1	GES -1	36	1	GES 101 History of Kazakhstan	5	GC/CC
			2	GES 102 Philosophy	5	GC/CC
			3	GES 103 Social and Political Knowledge Module (Sociology, Cultural Studies, Political Science, Psychology)	8	GC/CC
			4	GES 1(2)04 Physical Culture	8	GC/CC
			5	GES 205 Information and Communication Technologies	5	GC/CC
			6	1. GES 106/1 Fundamentals of Legal Literacy and Anti-Corruption culture/ 2. GES 106/2 Fundamentals of Ecology and Safe life/ 3. GES 106/3 Fundamentals of Economics and Entrepreneurship/ 4. GES 106/4 Fundamentals of Leadership and receptivity to innovation/ 5. GES 106/5 Emotional Intellect/ 6. GES 106/6 Fundamentals of mathematical statistics	5	GC/OC
2	GLC -2	25	1	GLC 101 Kazakh (Russian) Language	10	GC/CC
			2	GLC 102 Foreign Language	10	GC/CC
			3	GLC 203 English for Academic Purposes	5	CC/UK
3	GER – 3	22	1	GER 201 Inclusive Education	6	CC/UK
			2	GER 402/1 Fundamentals of Educational research	10	CC/UK

	Global Ethics and scientific research		3	GER 303 Professional ethics and identity	6	MC/UK
4	GPS – 4	21	1	GPS 201 Educational psychology	6	CC/UK
	General pedagogical subjects		2	GPS 202 Pedagogy and didactic	6	CC/UK
			3	GPS 303 Criteria Assessment technology	5	CC/UK
			4	CT(I)P 104 Continuous training (introducer) practice	1	CC/UK
				CT(I)P 104 Training, solving mathematical problems practice	1	CC/UK
			5	C(PP)P 205 Continuous (Psychology and Pedagogical) Practice	1	CC/UK
				C(PP)P 205 Training (programming) practice	1	CC/UK
5	TMFTMCS – 5	44	1	TMFTMCS 101/1 Elementary mathematics	5	CC/OC
	Theoretical and methodological foundations of teaching mathematics and computer science			TMFTMCS 101/2 Introductory course in Mathematics		
			2	TMFTMCS 302 Methods of teaching Mathematics	6	MC/UK
			3	TMFTMCS 303 Methods of teaching Informatics	6	MC/UK
			4	TMFTMCS 404/1 Methodological foundations of mathematical problem solving in 10-11 grades	5	MC/OC
				TMFTMCS 404/2 Teaching methods for solving Olympiad problems		
			5	PP 305 Pedagogical practice	6	CC/UK
			6	P(P)P 406 Production (Pedagogical) practice	16	MC/UK
6	FFMCS – 6	52	1	FFMCS 101 Linear algebra and analytic geometry	6	CC/UK
	Fundamentals of		2	FFMCS 202/1 Mathematical Analysis 1	5	CC/OC

	fundamental mathematics and computer science		FFMCS 202/2 Differential calculus of functions of one variable			
			3	FFMCS 203/1 Mathematical Analysis 2 FFMCS 203/2 Integral calculus of functions of one variable	6	CC/OC
			4	FFMCS 304/1 Mathematical Analysis 3 FFMCS 304/2 Differential and integral calculus of functions of many variables	5	CC/OC
			5	FFMCS 205/1 Algebra and Number Theory FFMCS 205/2 Higher algebra	5	CC/OC
			6	FFMCS 406/1 Practice of decisions of geometric problems FFMCS 406/2 Workshop on solving complicated tasks	5	MC/OC
			7	FFMCS 407/1 Workshop on solving text tasks FFMCS 407/2 Workshop on solving of logical tasks	5	MC/OC
			8	FFMCS 408/1 Cybersecurity FFMCS 408/2 Program and data security	5	MC/UK
			9	FFMCS 209 Algorithmization and programming	5	CC/UK
			10	FFMCS 210/1 Computer Architecture and Operating Systems FFMCS 210/2 Hardware support of computer equipment	5	CC/OC
			7	AAMCS-7 Applied aspects of mathematics and computer science	32	1
			2	AAMCS 302 Probability theory and mathematical statistics	5	CC/UK
			3	AAMCS 203/1 Computer graphics AAMCS 203/2 Methods of creating an interactive interface	5	CC/OC
			4	AAMCS 304 Object Oriented Programming	5	CC/UK
			5	AAMCS 305/1 Computer game programming AAMCS 305/2 Languages and technologies of programming	5	CC/OC
			6	AAMCS 406 Robotics in education	4	CC/UK

			7	P(P)P 407 Pre-diploma pedagogical practice	2	MC/UK
8	Final certification	8		WDDP(P)PCE 401 Writing and defending a diploma paper (project) or passing a comprehensive exam	8	FC
	IN TOTAL:	240			240	