MINISTRY OF EDUCATION AND SCIENCE OF KYRGYZ REPUBLIK
KYRGYZ-GERMAN INSTITUTE OF APPLIED INFORMATICS

«Approved» by _____ MoES of KR

" __ " ___ 20_8
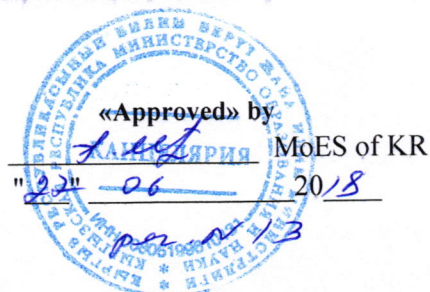
Individual curriculum
(Kyrgyz-German)

Training programme: *Informatics*
Spacialties: *Software Technologies, Web Informatics, Medical Informatics*
Academic degree: *Bachelor of Sciences, BSc.*
Duration of training: 4 years

1 semester

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-001	Mathematics 1	4	4	2		1	1
AIN1-003	Introduction to Engineering & Computer Sciences	4	4	2		1	1
AIN1-007	Programming Languages 1	6	6	2		2	2
AIN1-026	German 1	6	6		6		
AIN1-024	English 1						
AIN1-009	Mathematical Logic & Algorithm Theory	4	4		4		
AIN1-036	Introduction to Enterpreunership	4	4	2		1	1
	Total	**30**	**30**	**9**	**10**	**5**	**6**

2 semester

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-002	Mathematics 2	4	4	2		1	1
AIN1-008	Programming Languages 2	6	6	2		2	2
AIN1-027	German 2	6	6		6		
AIN1-025	English 2	4	4		4		
AIN1-035	History (State Examination)	4	4	2		1	1
AIN1-004	Linear Algebra	6	6	2		2	2
	Total	**30**	**30**	**8**	**10**	**6**	**6**

3 semester

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-010	Object Oriented Programming	4	4	2		1	1
AIN1-011	Database 1	6	6	2		2	2
AIN1-013	Software Engineering 1	4	4	2		1	1
AIN1-028	German 3	6	6		6		
AIN1-005	Discrete Mathematics	2	2	1			1
AIN1-006	Probability and Statistics	4	4	2		1	1
	Specialty modules	4	4	2		1	1
	Total	**30**	**30**	**11**	**6**	**6**	**7**
Specialty modules «Software Technologies»							
AIN1-015	Computer Networks & Telecommunications	4	4	2		1	1
Specialty modules «Web Informatics»							
AIN1-014	Computer Networks & Telecommunications	4	4	2		1	1
Specialty modules «Medical Informatics»							
MIN1-001	Latin in Medical Sciences	4	4	2		1	1

4 semester

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-029	German 4	6	6		6		
AIN1-014	Software Engineering 2	6	6	2		2	2
AIN1-017	Data Structures	4	4	2		1	1

Nr. of the module	Name of the module	ECTS	Total	Lecture	Seminar	Practice / lab	Self-study / with supervisor
AIN1-012	Database 2	4	4	2		1	1
AIN1-037	Introduction to Marketing	2	2	1			1
	Specialty modules	8	8	4		2	2
	Total	**30**	**30**	**11**	**6**	**6**	**7**
Specialty «Software Technologies»							
AIN1-016	Operating Systems & Computer Architecture	8	8	3		2	3
Specialty «Web Informatics»							
AIN1-016	Operating Systems & Computer Architecture	8	8	3		2	3
Specialty «Medical Informatics»							
MIN1-002	Medical Biophysics	4	4	2		1	1
MIN1-003	Physiology and Anatomy 1	4	4	2		1	1

5 semester							
				Academic hour per semester			
Nr. of the module	Name of the module	ECTS	Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-030	German 5	6	6		6		
AIN1-018	Mobile App Development	6	6	2		2	2
AIN1-019	Design & Analysis of Algorithms	6	6	2		2	2
	Specialty modules	12	12	4		4	4
	Total	**30**	**30**	**8**	**6**	**8**	**8**
Specialty «Software Technologies»							
WIN1-001	Web Technologies	6	6	2		2	2
WIN1-002	Web Programming	6	6	2		2	2
Specialty «Web Informatics»							
WIN1-001	Web Technologies	6	6	2		2	2
WIN1-002	Web Programming	6	6	2		2	2
Specialty «Medical Informatics»							
MIN1-005	Radiation and Instrumental Diagnostics 1	4	4	2		1	1
MIN1-007	Medical Biology	4	4	2		1	1

MIN1-004	Physiology and Anatomy 2	4	4	2		1	1

6 semester

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-020	Artificial Intelligence	6	6	2		2	2
AIN1-031	German 6	6	6		6		
AIN1-022	Human Computer Interaction (HCI)	4	4	2		1	1
AIN1-038	Project Management	2	2	1			1
	1 elective module from catalogue Nr. 1	4	4	2		1	1
	Specialty modules	8	8	4		2	2
	Total	**30**	**30**	**11**	**6**	**6**	**7**

Specialty «Software Technologies»

AIN1-021	Theoretical Informatics	4	4	2		1	1
AIN1-023	System Programming 1	4	4	2		1	1

Specialty «Web Informatics»

WIN1-003	Content Management Systems	4	4	2		1	1
WIN1-004	Development of Smartphone User Interfaces	4	4	2		1	1

Specialty «Medical Informatics»

MIN1-008	Health and Health Care	4	4	2		1	1
MIN1-006	Radiation and Instrumental Diagnostics 2	4	4	2		1	1

7 semester

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor

Nr.	Name	ECTS	Total	Lecture	Seminar	Practice / lab	Self-study / with supervisor
AIN1-033	Kyrgyz	8	8		8		
AIN1-034	Philosophy	2	2	1	1		
AIN1-039	Internship 1	10	10				
	Obligatory Module 6 ECTS, Catalogue 2	6	6	2		2	2
	Major modules	4	4	2		1	1
	Сумма	**30**	**30**	**5**	**9**	**3**	**3**
	Specialty «Software Technologies»						
AIN1-041	Object Oriented System Development	4	4	2		1	1
	Specialty «Web Informatics»						
WIN1-005	Management of Webservers	4	4	2		1	1
	Specialty «Medical Informatics»						
	Obligatory Module 4 ECTS	4	4	2		1	1

8 semester			Academic hour per semester				
Nr. of the module	Name of the module	ECTS	Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-040	Internship 2	18	18				
AIN1-053	Bachelor Thesis	12	12				
	Total	**30**	**30**				

Rector INAI.kg   **Omurov N. K.**

Catalogue of elective modules

Training programme: *Informatics*
Specialties: *Software Technologies, Web Informatics, Medical Informatics*

Catalogue of elective modules 1

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-042	Introduction to Cloud Computing	4	4	2		1	1
AIN1-043	Microprocessors & Microcontrollers	4	4	2		1	1
AIN1-051	C# Programming	4	4	2		1	1
AIN1-052	Geographical Information Systems	4	4	2		1	1
MIN1-009	Physical Medicine	4	4	2		1	1
MIN1-010	Obtaining and Processing of Medical Data	4	4	2		1	1
MIN1-011	Multimedia Systems und Telemedicine	4	4	2		1	1
MIN1-012	Hardware of Medical Information Systems	4	4	2		1	1
MIN1-013	Signal Processing of Medical Devices	4	4	2		1	1
MIN1-014	Medical Informatics and Statistics	4	4	2		1	1

Catalogue of elective modules 2

Nr. of the module	Name of the module	ECTS	Academic hour per semester				
			Total	Lecture	Seminar	Praqctice / lab	Self-study / with supervisor
AIN1-044	Software Architecture & Design patterns	6	6	2		2	2
AIN1-045	Introduction to Data Mining	6	6	2		2	2
AIN1-046	Number Theory	6	6	2		2	2
AIN1-047	Machine Learning	6	6	2		2	2
AIN1-048	System programming 2	6	6	2		2	2
AIN1-049	Robotics	6	6	2		2	2
AIN1-050	Information Security	6	6	2		2	2