Bachelor Program: Computer Science and Computer Engineering
Study Program: Software for Computers and Computer-Aided Systems

Duration: 2 years of study

Language of Training: Russian

№	Subject	Semester	Hours	Credits
B.1.1	**Basic part**			
B.1.1.1	History	1	108	3
B.1.1.2	Philosophy	4	108	3
B.1.1.3	Foreign language	1-3	288	8
B.1.1.4	Economics	2	108	3
B.1.1.5	Mathematics	1-3	576	16
B.1.1.6	Physics	2-4	360	10
B.1.1.7	Computer Science	1-2	252	7
B.1.1.8	Circuit Engineering and Microprocessor Technology	5-6	288	8
B.1.1.9	Electrical Engineering and Electronics	6	180	5
B.1.1.10	Programming	1-4	612	17
B.1.1.11	Information Protection	6-7	180	5
B.1.1.12	Databases	4-5	324	9
B.1.1.13	Engineering and Computer Graphics	3-4	288	8
B.1.1.14	Life Safety	5	108	3
B.1.1.15	History of Science and Technology	2	72	2
B.1.1.16	Physical Culture	1	72	2
B.1.2	**Variable part**			
B.1.2.1	Russian Language and Communication Style	2	72	2
B.1.2.2	Jurisprudence	3	108	3
B.1.2.3	Business Communication in a Foreign Language	4	72	2
B.1.2.4	Professionally-oriented Communication in a Foreign Language	5	72	2
B.1.2.5	Enterprise Economics	6	72	2
B.1.2.6	Ecology	2	72	2
B.1.2.7	Networks and Telecommunications	4	108	3
B.1.2.8	Metrology, Standardization and Certification	8	72	2
B.1.2.9	Computers and peripherals	1	144	4
B.1.2.10	Operating Systems	3	108	3
B.1.2.11	Computational Mathematics	3	144	4
B.1.2.12	Decision Theory	5	108	3
B.1.2.13	Data Processing Structures and Algorithms	4	216	6
B.1.2.14	Internet Technologies	5	144	4
B.1.2.15	Theory of Computational Processes	6	108	3
B.1.2.16	Principles and Technologies for Creating Electronic Educational Resources	8	72	2
B.1.2.17	Object- oriented programming	7	180	5
B.1.2.18	Functional and Logical Programming	6	180	5
B.1.2.19	Theory of Programming Languages and Translation Methods	7	108	3
B.1.2.20	Theory in Management Information Systems	7	216	6

№	Subject	Semester	Hours	Credits
B.1.2.21	Project cost-effectiveness	8	72	2
B.1.3	**Elective courses**			
B.1.3.1.1	Psychology	1	108	3
B.1.3.1.2	Engineering Psychology	1	108	3
B.1.3.3.1	Semiconductor Physics	5	72	2
B.1.3.3.2	Semiconductors	5	72	2
B.1.3.4.1	Physical Systems Modeling	7	144	4
B.1.3.4.2	InformationPprocesses Modeling	7	144	4
B.1.3.5.1	Optimization Methods	6	144	3
B.1.3.5.2	Mathematical Programming	6	144	3
B.1.3.6.1	Management Information Systems	7	108	3
B.1.3.6.2	Design and Implementation of Information Systems	7	108	3
B.1.3.7.1	Engineering Design and Computational Modeling Environments	7-8	216	6
B.1.3.7.2	Automated Research Systems	7-8	216	6
B.1.3.8.1	Computer Design Basics	5	216	6
B.1.3.8.2	Interactive Graphic Systems	5	216	6
B.1.3.9.1	.NET Programming	8	108	3
B.1.3.9.2	Java programming	8	108	3
B.1.3.10.1	Computer Processing of Experimental Data	7	108	3
B.1.3.10.2	Digital Signal Processing Systems	7	108	3
B.1.3.11.1 / B.1.3.11.2	Team Sports / Recreational Physical Culture	2-6	328	
B.2	**Practice (variable part)**		**756**	**21**
B.2.1	Educational (study) practice *	2	108	3
B.2.2	Production (technological) practice **	4	108	3
B.2.3	Production (technological) practice **	6	216	6
B.2.4	Undergraduate practice	8	324	9
V.3	**Sstate final examination (basic part)**		**324**	**9**
F.	**Optional subjects**			
F.1	Quality audit	4	72	
F.2	Labor Law	5	72	
F.3	Optional Foreign Language Course	6	72	
F.4	Environments of Engineering Design, Computational Modeling and Computer Processing of Experimental Data	6	108	
	Total		**9004**	**240**