

BACHELOR OF SCIENCE IN INFORMATION SYSTEMS AND TECHNOLOGY

The programme allows the student to acquire solid knowledge of information technologies as well as relevant practical skills. Graduates of the programme can begin their careers in a field of their specialisation and choose from numerous positions at different levels or pursue their academic path with further Master programme which provides a wider range of fundamental methodologies and practical experience.

The programme combines numerous disciplines in mathematics, information technology, programming, data management and others, which gives students opportunities to work in various fields in the roles of programmer, system administrator, IT project manager.

Language of instruction/examination: Russian

Official duration: 6 semesters (3 years): 5 semesters + Bachelor thesis

ECTS: 184 ECTS

Degree awarded: Bachelor of Science in Information Systems and Technology

COURSES

Courses for Bachelor of Science in Information Systems and Technology programme are divided into 3 main categories: **Core courses (100 ECTS)** which are obligatory and **Specialisation modules (52 ECTS)** which are introduced during the 2nd and 3rd year of the programme, **and Workshops (2 ECTS)**. At the end of the studies the student is obliged to prepare a **Bachelor thesis (30 ECTS)**.

CURRICULUM OVERVIEW

	Course	ECTS	Assessment	Module lead
	SEMESTER 1	30		
BM0061	Informatics	6	Oral exam	Denis Gnyrya
BM0095	Mathematics	6	Oral exam	Vladimir Baturin
BM0009	Algebra and Number Theory	6	Practical coursework	Vladimir Baturin
BM0040	Discrete Mathematics	4	Practical coursework	Vladimir Baturin
BM0042	English Language	4	Oral exam	Anna Talova
BM0055/	History/	4	Practical coursework	Larisa Salieva/
BM0024	Logic			Vladimir Baturin
	SEMESTER 2	30		
BM0104	Probability Theory and Mathematical Statistics	6	Oral exam	Anna Sosnovskaya
BM0121	The Basics of Programming in C++	6	Oral exam	Polina Zakharova
BM0123	Theory of Information Processes and Systems	6	Oral exam	Kirill Alekseev
BM0053	Hardware of Computer Systems	6	Practical coursework	Kirill Alekseev
BM0067	Information Technology	4	Practical coursework	Denis Gnyrya
BM0062	Information and Analytical Systems	2	Practical coursework	Alexander Pavlov
	SEMESTER 3	32		
BM0064	Information Security and Information Protection	4	Oral exam	Sergey Evseev
BM0020	Content Management	4	Practical coursework	Kirill Alekseev
BM0111	Raster Graphics	6	Practical coursework	Andrey Zaikov
BM0125	Vector Graphics	6	Practical coursework	Ivan Glazkov
BM0004	Administration of Information Systems	6	Oral exam	Kirill Alekseev
BM0063	Information Processing Technologies	6	Oral exam	Kirill Alekseev

	SEMESTER 4	32		
BM0060	Infocommunication Systems and Networks	6	Oral exam	Kirill Alekseev
BM0033	Design of Information Systems and Technologies	6	Oral exam	Kirill Alekseev
BM0035	Development of Interactive Applications for Websites	6	Practical coursework	Kirill Alekseev
BM0029	Data Management	6	Oral exam	Kirill Alekseev
BM0079	Java Programming	4	Practical coursework	Kirill Alekseev
BM0058	Hypertext and Multimedia Information Technologies	4	Practical coursework	Kirill Alekseev
	SEMESTER 5	30		
BM0124	3D Graphics	6	Practical coursework	Ivan Glazkov
BM0034	Development of an Electronic Portal	6	Oral exam	Kirill Alekseev
BM0041/	E-commerce/	4	Practical coursework	Kirill Alekseev/
BM0105	Project Management			Anastasia Kashirina
BM0028	COM-technologies	6	Oral exam	Kirill Alekseev
BM0049	Functional Programming	6	Oral exam	Artem Lomakin
SEM0003	Practical Workshop	2	Practical coursework	Valentin Mingalev
	SEMESTER 6	30		
Bachelor Thesis				