



List of credits on the speciality “**Physics and Astronomy**”  
Specialization “**Computer Modelling of Physical Processes**”

<b>BACHELOR</b>		
NAME OF SUBJECTS	SEMESTER	CREDITS
Mathematical analysis 1	Autumn	6
Mathematical analysis 3	Autumn	5
Analytic geometry and linear algebra	Autumn	5
Differential and integral equations	Autumn	5
General Physics 2	Autumn	7
General Physics 4	Autumn	7
General Physics 6	Autumn	4
Probability theory and mathematical statistics	Autumn	2.5
Methods of mathematical physics 1	Autumn	3.5
Computer Graphics 1	Autumn	2.5
Theoretical physics 1	Autumn	6
Theoretical physics 3	Autumn	4
Theoretical physics 5	Autumn	3.5
Computer simulation in physics 1	Autumn	4
Informatics and programming 1	Autumn	7
Informatics and programming 3	Autumn	3.5
Mechanics of continuous media	Autumn	3.5
Basics of modern electronics 1	Autumn	4
Physics of solid state: Physics of crystals	Autumn	6
Methodology of teaching physics	Autumn	2.5
Special sections of informatics 1	Autumn	5
Mathematical analysis 2	Spring	6
Basics of vector and tensor analysis	Spring	4
General Physics 1	Spring	7
General Physics 3	Spring	8
General Physics 5	Spring	7
Methods of mathematical physics 2	Spring	3.5
Computer Graphics 2	Spring	3
Theoretical physics 2	Spring	6
Theoretical physics 4	Spring	4
Theoretical physics 6	Spring	3.5
Computer simulation in physics 2	Spring	4.5
Informatics and programming 2	Spring	4.5
Special sections of mathematical analysis	Spring	6
Discrete mathematics	Spring	4.5
Basics of modern electronics 2	Spring	4.5
Astrophysics: Physics of the universe	Spring	3
Electrodynamics of continuous media: Electromagnetic field in the medium	Spring	4

Infrared thermography: Fundamentals of thermography	Spring	2
Fundamentals of teaching physics	Spring	3
Fundamentals of Informatics	Spring	5
Special sections of informatics 2	Spring	5.5

<b>MASTER</b>		
NAME OF SUBJECTS	SEMESTER	CREDITS
Physics of nanostructures	Autumn	4
Problems of sustainable development Management	Autumn	2
Problems of modern physics 1	Autumn	2
Physics of magnetic phenomena 1	Autumn	3
Methods of experimental research 1	Autumn	3.5
Physics and technology of low temperatures 1	Autumn	4
Fundamentals of Quantum Field Theory	Autumn	3
Modern technologies in solid state physics	Autumn	3
Methodology of teaching physics 1	Autumn	2
Computer modeling of collective processes in a solid 1	Autumn	6
Numerical experiment in multiparticle systems	Autumn	6
Patent and Intellectual Property	Spring	3
Mathematical modeling of systems and processes	Spring	4
Macroscopic quantum phenomena	Spring	3
Problems of modern physics 2	Spring	2.5
Physics of magnetic phenomena 2	Spring	3
Methods of experimental research 2	Spring	1
Physics and technology of low temperatures 2	Spring	3
Methodology of teaching physics 2	Spring	1.5
Computer modeling of collective processes in a solid 2	Spring	6