Faculty of Meteorology

Field of study "Applied Hydrometeorology"

Duration: 4 years, Full-time

Award: Bachelor of Science (Code 05.03.05)

Specialization: Aeronautical Meteorology **Bold-typed Courses are taught in English**



Course name	Academic hours, total	Credits, total	Semesters	Assessment
CO	RE COURSES	1		1
Foreign Language	432	12	1-5	Test, Exam
History	144	4	2-3	Test, Exam
Philosophy	144	4	4-5	Test, Exam
Economics and Production Management	72	2	6	Test
Science of Law	72	2	5	Test
Mathematics	576	16	1-4	Test, Exam
Physics	468	13	1-4	Exam
Chemistry	180	5	1-2	Test, Exam
Ecology	108	3	7	Exam
Information Technology (IT)	252	7	1-2	Exam
Physics of the Atmosphere	288	8	2-3	Test, Exam, Term Paper
Physics of Oceans	72	2	4	Exam
Physics of Inland Waters	72	2	4	Test
Electronics and Electrotechnics	108	3	3	Exam
Methods and Resources for Hydrometeorological Measurements	216	6	3-4	Test, Exam, Term Paper
Numerical Methods of Mathematical Modelling	252	7	7-8	Test, Exam
Climatology	144	4	5-6	Test, Exam
Statistical Methods for the Analysis of Hydrometeorological Information	108	3	5	Test
Health and Life Safety	72	2	4	Test
Theoretical Mechanics	72	2	2	Test
Mechanics of Fluids and Gases (Hydromechanics)	108	3	3	Test
Metrology, Standardization and Certification	72	2	3	Test
Physical Education	72	2	1-2	Test
Russian Language and Culture of Speech	72	2	1	Test
Meteorological Information Supply for National Economy	252	7	7-8	Test, Exam
Computational Mathematics	72	2	4	Test
Mathematics (Probability Theory and Mathematical Statistics)	72	2	4	Test
Geophysics	72	2	1	Test
Engineering Graphics	108	3	1-2	Test
Mechanics of Fluids and Gases (Geophysical Fluid Dynamics)	108	3	4	Exam
Dynamic Meteorology	108	3	5	Exam, Term paper
GIS	108	3	6	Exam, Term paper Exam
Fundamentals of Aeronautics	72	2	5	Test
Mesoscale Meteorology and Now-casting	72	2	5	Test
Methods of Sensing the Environment	216	6	5-6	Test, Exam
Synoptic Meteorology	216	6	5-6	Exam, Term Paper
Space Meteorology Space Meteorology	180	5	6-7	Test, Exam
Aeronautical Meteorology	180	5	6-7	Test, Exam Test, Exam
Meteorological Service of Flights	216	6	7-8	·
<u> </u>				Test, Exam
Elective Courses for Physical Education	328	9	1-6	Test

Course name	Academic hours, total	Credits, total	Semesters	Assessment				
ELECTIVE COURSES (OPTION 1 OR OPTION 2)								
Business Communication (option 1)	108	3	1	Exam				
Foreign Russian Literature (option 2)	108	3	1	Exam				
Sustainable Development (option 1)	72	2	6	Test				
Sociology (option 2)	72	2	6	Test				
Processing and Visualization of the Satellite Data with the use of GIS (option 1)	108	3	5	Exam				
Impact on Atmospheric Processes and Phenomena (option 2)	108	3	5	Exam				
Meteorological Information Supply for Aeronautical Meteorological Offices. Part 1. (option 1)	72	2	6	Test				
Meteorological parameters, units of measurement and instruments (option 2)	72	2	6	Test				
Meteorological Information Supply for Aeronautical Meteorological Offices. Part 2. (option 1)	108	3	7	Test				
Adverse and Dangerous Weather Conditions (option 2)	108	3	7	Test				
Information Exchange in the Process of Solving Problems of Aeronautical Meteorology (<i>option 1</i>)	108	3	8	Exam				
Networking Technologies in the Information Exchange Process (option 2)	108	3	8	Exam				
Aeronautical Weather Forecasting. Part 1. (option 1)	72	2	6	Test				
The Earth as a Planet (option 2)	72	2	6	Test				
Aeronautical Weather Forecasting. Part 2. (option 1)	108	3	7	Test				
Specialized Tasks of Aeronautical Meteorology (option 2)	108	3	7	Test				
Satellite Analysis of the Convective Clouds (option 1)	144	4	8	Exam				
Satellite Diagnostics of the Cloud Systems (option 2)	144	4	8	Exam				
Equipment for Meteorological Supply of Aviation (option 1)	108	3	8	Test				
Automatic Weather Stations of General and Specific Use (option 2)	108	3	8	Test				
	TRAININGS							
Practical Training	216	6	2	Graded Test				
Practical Training	324	9	4	Graded Test				
Research Project	108	3	6	Graded Test				
Applied Practical Training	216	6	6	Graded Test				
Practical Training of Thesis Preparation	216	6	7	Graded Test				
Bibliography	72	2	4	Test				
Paper Writing and Standardization	36	1	8	Test				