

Bachelor Program Ecology and environmental management

Study Program: Ecology

Duration: 4 years

Language of training: Russian

№	Subject	Semester	Hours	Credits
Block 1 Disciplines (modules)				
B.1.1	Base disciplines			
B.1.1.1	History of Russia	1	108	3
B.1.1.2	Philosophy	5	108	3
B.1.1.3	Foreign language	1-3	/288	/8
B.1.1.3	Foreign language	1	108	3
B.1.1.3	Foreign language	2	108	3
B.1.1.3	Foreign language	3	72	2
B.1.1.4	Economy	3	108	3
B.1.1.5	Mathematics	2-3	/180	/5
B.1.1.5	Mathematics	2	108	3
B.1.1.5	Mathematics	3	72	2
B.1.1.6	Information technology	4	144	4
B.1.1.7	Physics	1	72	2
B.1.1.8	Chemistry	2	108	3
B.1.1.9	Biology	1-2	/216	/6
B.1.1.9	Biology	1	108	3
B.1.1.9	Biology	2	108	3
B.1.1.10	Geography	1	108	3
B.1.1.11	Geology	2	108	3
B.1.1.12	Soil Science	3	108	3
B.1.1.13	Life Safety	7	72	2
	<i>Module «Fundamentals of Ecology»</i>			
B.1.1.14	Basic Ecology	1	144	4
B.1.1.15	Geocology	4	108	3
B.1.1.16	Biodiversity	3	108	3
B.1.1.17	Human Ecology	4	108	3
B.1.1.18	Social Ecology	5	72	2
B.1.1.19	Environmental protection	8	108	3
	<i>Module «Earth Science»</i>			
B.1.1.20	Atmospheric Science	2	108	3
B.1.1.21	Hydrospheric Science	2	108	3
B.1.1.22	Biospheric Science	3	144	4
B.1.1.23	Landscape Science	2	108	3
	<i>Module «Basics of Environmental Management»</i>			
B.1.1.24	Basics of Environmental Management	1	108	3
B.1.1.25	Economy of Environmental Management	3	108	3
B.1.1.26	Sustainable Development	7	72	2
B.1.1.27	Environmental Impact Assessment	4	108	3
B.1.1.28	Environmental Law	5	72	2
	<i>Module « Applied Ecology»</i>			

№	Subject	Semester	Hours	Credits
B.1.1.29	Environmental Monitoring	6	180	5
B.1.1.30	Regulation and Reduction of Environmental Pollution	6	108	3
B.1.1.31	Technological Systems and Environmental Risk	7	72	2
B.1.1.32	Physical Culture	1	72	2
	BASE DISCIPLINES TOTAL		3744	104
B.1.2	Variable disciplines			
B.1.2.1	History of Science and Technology	2	72	2
B.1.2.2	Philosophy of Science and Technology	6	72	2
B.1.2.3	Intercultural and Professional Communication in a Foreign Language	/4-5	/144	\4
B.1.2.3	Intercultural and Professional Communication in a Foreign Language	4	72	2
B.1.2.3	Intercultural and Professional Communication in a Foreign Language	5	72	2
B.1.2.4	Social Science	6	72	2
B.1.2.5	Introduction to Basic Chemistry	1	108	3
B.1.2.6	Organic Chemistry	3	144	4
B.1.2.7	GIS Technology	4	108	3
B.1.2.8	Environmental Geochemistry	3	108	3
B.1.2.9	Fundamentals of Biochemistry	5	144	4
B.1.2.10	Biogeography	7	108	3
B.1.2.11	Ecology of Plants, Animals and Microorganisms	5	180	5
B.1.2.12	Applied Ecology	7	144	4
B.1.2.13	Chemical Methods of Environmental Research	8	108	3
B.1.2.14	Contemporary Problems of Ecology	5	180	5
B.1.2.15	Environmental Biotechnology	7	108	3
B.1.2.16	Environmental Epidemiology	8	108	3
B.1.2.17	Environmental Toxicology	6	180	5
B.1.2.18	Environmental Immunology	6	72	2
B.1.2.19	Environmental Audit	4	108	3
B.1.2.20	Environmental Expertise	7	72	2
B.1.2.21	Physical Methods of Environmental Research	7	72	2
B.1.3	Disciplines of choice			
B.1.3.1.1	Psychology	4	108	3
B.1.3.1.2	Engineering Psychology	/4	/108	/3
B.1.3.2.1	History of Russian Culture	1	72	2
B.1.3.2.2	World Cultural Heritage	/1	/72	/2
B.1.3.3.1	Biometry	6	108	3
B.1.3.3.2	Systemic Analysis to Ecological Data	/6	/108	/3
B.1.3.4.1	Organic Xenobiotics	4	108	3
B.1.3.4.2	Xenobiology	/4	/108	/3
B.1.3.5.1	Fundamentals of Biophysics	6	72	2
B.1.3.5.2	Assessment the Effects of Physical Factors on Living Systems	/6	/72	/2
B.1.3.6.1	Probability Theory and Mathematical	5	72	2

№	Subject	Semester	Hours	Credits
	Statistics			
B.1.3.6.2	Probability Theory and Mathematical Processing of Experimental Data	/5	/72	/2
B.1.3.7.1	Ecological and Economic Balance of Territories	7	144	4
B.1.3.7.2	Monitoring and Control of Water Use	/7	/144	/4
B.1.3.8.1	Radioecology	6	108	3
B.1.3.8.2	Environmental Aspects of Different Types of Radiation	/6	/108	/3
B.1.3.9.1	Ecology and Culture	7	144	4
B.1.3.9.2	Bioethics	/7	/144	/4
B.1.3.10.1	Theoretical Foundations of Environmental Health	8	108	3
B.1.3.10.2	Plant Ecology and Fundamentals of Phytoremediation	/8	/108	/3
B.1.3.11.1	Environmental Management	7	72	2
B.1.3.11.2	Environmental Aspects of Enterprise Management	/7	/72	/2
B.1.3.12.1	Oil Chemistry and Ecology	5	72	2
B.1.3.12.2	Environmental Technologies in the Oil and Gas Industry	/5	/72	/2
B.1.3.13.1	Team sports	/2-6	/328	/0
B.1.3.13.1	Team sports	2	82	0
B.1.3.13.1	Team sports	3	82	0
B.1.3.13.1	Team sports	4	82	0
B.1.3.13.1	Team sports	5	38	0
B.1.3.13.1	Team sports	6	44	0
B.1.3.13.2	Physical Culture of Recuperation	/2-6	/328	/0
B.1.3.13.2	Physical Culture of Recuperation	/2	/82	0
B.1.3.13.2	Physical Culture of Recuperation	/3	/82	0
B.1.3.13.2	Physical Culture of Recuperation	/4	/82	0
B.1.3.13.2	Physical Culture of Recuperation	/5	/38	0
B.1.3.13.2	Physical Culture of Recuperation	/6	/44	0
	TOTAL FOR VARIABLE DISCIPLINES		3928	100
	TOTAL FOR BLOCK 1		7672	204
Block 2 Practical Training				
B.2	Practical Training (variable part)		1080	30
B.2.1	1st Training Practice	2	216	6
B.2.2	2 st Training Practice	4	216	6
B.2.3	Industrial Practice	6	216	6
B.2.4	Graduation Project Preparation	8	432	12
Block 3 Final Certification by the State (base disciplines)				
B.3	Final Certification by the State (base disciplines)		216	6
	TOTAL IN DIRECTION		8968	240
F.	Optional Disciplines			
F.1	Environmental Theory and Practice	5	108	3