BASES OF ENVIRONMENTAL AND ENERGY SUSTAINABILITY OF PRODUCTION

ANNOTATION
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-36 01 01 Engineering technology

	STUDY MODE		
	Full-time	Part-time	Part-time(shortened program)
Course	2	3	3
Semester	3	6	6
Lecture, hours	34	6	8
Laboratory classes, hours	16	4	4
Test, semester	3	6	6
Classroom hours for the academic discipline	50	10	12
Independent work, hours	58	98	96
Total course duration in hours / credit units	108 / 3		

1. Brief content of the academic discipline. Ecological and energy representation of sustainable development. Reduced environmental impact with today's cleaner technologies. Modern principles of nature management for solving environmental and resource-saving tasks, solving problems of efficient use of fuel and energy resources based on world experience and the state policy of the Republic of Belarus in the field of energy saving.
2. Learning outcomes:
know: features of the interaction between production and the natural environment; environmental problems arising from production; methods of environmental management in order to organize sustainable production; the main directions of the state policy in the field of energy saving; methods of production, transport and consumption of thermal and electrical energy; environmental and economic problems of energy and the main ways to solve them; be able to: justify the choice of methods to reduce environmental impact; use legal documents in the field of environmental protection; implement a systematic approach to the organization of energy efficiency, evaluate technological processes and devices in terms of their energy efficiency; use heat and electricity metering devices; use the main methods of energy saving and energy efficiency;
own: analysis of environmental quality criteria; methods for determining the state of the environment; methods for determining energy saving and energy efficiency of production.
3. Competences being formed: BOD-2 "To be able to apply the basic rules of safety, industrial sanitation, fire safety, ecology and methods of protecting production personnel and the public from the possible consequences of accidents, natural disasters, man-made disasters."
4. Requirements and forms of current and intermediate certification: test (oral and written form). To be admitted to the test, the student must successfully complete two tests, one for the module of the academic semester, as well as complete and defend all laboratory work.