

Protection of the population and objects from emergency situations. Radiation safety
ANNOTATION
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION
for specialties 1– 36 01 01 Engineering technology
1– 53 01 01 Automation of technological processes and production (by directions)
1– 36 01 04 Equipment and technologies for highly efficient material processing processes

	STUDY MODE
	Full-time
Course	1
Semester	1
Lectures, hours	34
Laboratory classes, hours	16
Test, hours	1
Total classroom hours for discipline	50
Independent work, hours	58
Total course duration in hours / credit units	108/3

1. Brief content of the discipline

Theoretical foundations of human life safety. Brief description of emergency situations. Emergency prevention and response. Actions of governing bodies, forces of the State Emergency Service, Civil Defense, the population in emergency situations. Physical nature and sources of radiation hazard. Fundamentals of radiation safety of living organisms. The disaster at the Chernobyl nuclear power plant and its consequences for the Republic of Belarus Measures to protect the population from ionizing radiation

2 Learning outcomes

know: - the theoretical foundations of ensuring the safety of human life in modern conditions, taking into account the profile of professional training;

- the content of measures to prevent emergency situations;
- the procedure for providing first aid to victims in emergency situations;
- the procedure for providing psychological self- and mutual assistance to victims in emergency situations;
- the content of measures to ensure the sustainability of the functioning of organizations in the face of dangers and in emergency situations of a natural and man-made nature, dangers arising (arising) during military operations or as a result of these actions;
- the structure, tasks, functions and capabilities of the State System for the Prevention and Elimination of Emergency Situations and Civil Defense.
- basics of radiation safety of a person and his survival in conditions of radioactive contamination.

be able to: - use methods of forecasting, assessment of the situation in emergency situations and take measures to prevent them in their areas of work;

- act correctly in emergency situations and make appropriate decisions;
- survive in emergency situations of a natural and man-made nature, dangers arising (arising) during the conduct of hostilities or as a result of these actions;
- organize work to ensure safety in emergency situations;
- use personal protective equipment;
- work with chemical, dosimetric and environmental control devices, as well as with other equipment used in the surveillance and laboratory control network.

possess: - the skills of implementing measures to prevent emergency situations;

- skills to take measures to ensure the sustainability of the functioning of organizations in emergency situations of peacetime and wartime.

3. 3. Formed competencies

Competency codes	Names of competencies being formed
For the specialty 1-36 01 04 БПІК-7	Be able to apply the basic rules of safety, industrial sanitation, fire safety and methods for protecting production personnel, the public and the environment from the possible consequences of accidents, natural disasters, man-made disasters
For the specialty 1-36 01 01 БПІК-2	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
For the specialty 1-53 01 01 БПІК-2	Be able to ensure compliance with safety regulations, industrial sanitation, fire safety and labor protection standards, develop environmental and energy-saving measures, master the basic methods of protecting production personnel and the population from the negative impacts of factors of anthropogenic, technogenic, natural origin

- Requirements and forms of current and intermediate certification

The following forms are used to diagnose competencies:

- oral; - written; - oral-written.
- To assess the level of knowledge of students, the following diagnostic tools are used:
- written reports on laboratory work (written form);
- reports on laboratory work with their oral defense (oral and written form);
- assessment based on the module-rating system (oral and written form);
- oral tests (oral form).