## FUSION WELDING AND THERMAL CUTTING TECHNOLOGY

(name of the discipline)

# ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

specialty 1-36 01 06 "equipment and technology of welding production"	
direction of specialty	
specialization	

	1	form of higher education		
	Full time	Correspondence	Correspondence	
	(daytime)		abbreviated	
Course	2,3	2,3	3,4	
Semester	4,5	4,5	5,6	
Lectures, hours	100	14	12	
Practical (seminar) classes, hours	16	4	4	
Laboratory classes, hours	32	8	12	
Course project, semester	5	5	7	
Credit, semester	4	4	5	
Exam, semester	5	5	6	
Classroom hours per academic discipline	148	28	28	
Independent work, hours	208	328	328	
Total hours in academic discipline / credit units		356/10		

# 1. Brief content of the discipline

The purpose of teaching the discipline is to develop students' ideas, knowledge and skills on the physical foundations of various fusion welding methods, the features of their use in industry, the principle of developing welding consumables, and the technical methods of welding various metals and alloys.

## 2. Learning outcomes

As a result of mastering the academic discipline, the student must

#### know:

- types and methods of fusion welding used in production;
- features of technological processes and technologies for welding various classes of steels, cast iron and non-ferrous metals;
- standards in force in the Republic of Belarus related to technological processes of fusion welding;

#### be able to:

- choose the method of fusion welding and thermal cutting, welding materials, equipment and modes that ensure the quality of the welding process;
- to evaluate various options for technological processes of fusion welding;
- to develop effective technologies for welding a given design, taking into account real production conditions;

#### own:

- methods of control over the production of welding works;
- safety requirements in the production of welding work;
- rules for control of technological parameters of fusion welding and thermal cutting.

## 3. Formed competencies

BPS-8 - Master the technologies of fusion welding and thermal cutting of metals and alloys, know the equipment, welding consumables and be able to select welding mode parameters that ensure the quality of welded joints.

## 4. Requirements and forms of current and intermediate certification.

When studying the discipline, a module-rating system for assessing knowledge is used. Used assessment tools for the academic discipline are stored at the department.