## SPECIAL TECHNOLOGIES IN WELDING PRODUCTION

(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	

	form of higher education		
	Full time (daytime)	Correspondence	Correspondence abbreviated
Course	4	4	4
Semester	7	8	7
Lectures, hours	50	8	10
Laboratory classes, hours	34	6	8
Credit, semester	7	8	7
Classroom hours per academic discipline	84	14	18
Independent work, hours	24	94	90
Total hours in academic discipline / credit units		108/3	

## 1. Brief content of the discipline

The purpose of teaching discipline is to obtain and master students of the specialty 1-36 01 06 "Equipment and technology of welding production" of knowledge and skills on the physical basics of special technologies for welding and cutting and their use in the production of welded structures from metal and non-metallic materials.

# 2. Learning outcomes

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

#### know

The physical essence and technological features of special welding technologies; patterns and features of the change in the structure and properties of the combined materials (metals and alloys, various types of ceramics, plastics, etc.); technology welding of various metals and alloys; methods for determining the technological parameters of the regime for various welding methods.

## be able to:

Determine the physico-mechanical and operational properties of created materials and products; choose basic and welding materials for the manufacture of welded structures with special welding methods; select the welding method and welded modes of welded joints of various designs; evaluate the technical and economic feasibility of applying specific special welding and cutting methods.

#### own:

Methodology for measuring the determining technological parameters of special welding technologies using modern equipment in accordance with state standards; methods to activate contact surfaces of connected billets; methods of calculating the rational modes of special welding and cutting methods.

## 3. Formed competencies

**SC-14**: Know the theoretical foundations of soldering and welded technology, be able to clean the design of the connection, determine the method and develop the technological process of soldering or micro welding.

# 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.