

# WELDING PROCESS AND EQUIPMENT CONTROL

(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 (abbreviated)	Correspondence
Well	4	4	4
Semester	8	7	8
Lectures, hours	18	6	4
Laboratory classes, hours	12	4	2
Classroom examination (semester, hours)	-	7 (2 часа)	-
Exam, semester	8	7	8
Classroom hours per academic discipline	30	12	6
Independent work, hours	60	78	84
Total hours per academic discipline / credit units	90/3		

### 1. Brief content of the discipline

The purpose of teaching the discipline is to study the principles of constructing modern systems for operational control of the quality of a welded joint in various welding methods, familiarization with modern microprocessor systems for controlling the spatial position of the heating source relative to the joint; systems for program control and stabilization of process parameters and equipment in arc, contact and electron beam welding.

### 2. Learning outcomes

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

#### **know:**

- methods of control of technological processes of welding to obtain products of a given quality; main directions and prospects for the development of control systems in welding production;

#### **be able to:**

- choose a control system for various welding methods, ensure its maintenance;  
- manage welding processes using automation tools.

#### **own:**

- methods of designing and setting up automatic control systems for welding processes.

### 3. Formed competencies.

SK-15 - Know the basic principles of process and equipment control in 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.