

# **CERTIFICATION AND CERTIFICATION IN WELDING PRODUCTION**

(name of the discipline)

## **ANNOTATION**

### **TO THE CURRICULUM OF HIGHER EDUCATION INSTITUTIONS**

#### **Specialty 7-06-0714-02 Innovative technologies in mechanical engineering**

#### **Profiling Welding technologies**

Advanced higher education

	Form of higher education	
	Full-time (full-time)	Full-time (full-time) Part-time
Well	2	2
Semester	3	4
Lectures, hours	34	8
Practical classes, hours	34	8
Exam, semester	3	4
Classroom hours per academic discipline	68	16
Independent work, hours	132	184
Total hours per academic discipline/credit units	200/6	

#### **1. The purpose of the academic discipline.**

The purpose of the academic discipline is to develop students' knowledge, skills and abilities in matters of theoretical and applied metrology, standardization, attestation and certification. This will ensure, in combination with other disciplines, the student's preparation for various types of professional activities: experimental and research, technological, organizational, operational, production and management, testing.

#### **2. Planned results of studying the discipline.**

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

##### **know:**

- objects, tasks and types of professional activities related to the implementation of professional functions in metrology, standardization, attestation and certification, legislative and legal framework, basic concepts and definitions;
- legal basis for ensuring the uniformity of measurements, standardization, technical regulation and certification in the Republic of Belarus;
- international and state standardization system of the Republic of Belarus;
- specifics of Belarusian and Russian standards in the field of welding production;
- quality indicators and methods for their assessment;
- the procedure for confirming the conformity of products, processes, services (works), personnel competence, management systems;
- legal and legislative framework in the field of technical regulation and standardization of the Eurasian Economic Union.

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

- use technical regulations and legal acts in the field of technical regulation, metrology, certification, standardization and certification;
- evaluate product quality indicators;
- use in practice statistical methods for monitoring and managing the quality of processes and products;
- draw up documents to confirm the conformity of products, processes, services (works), personnel competence, management systems.

##### **have the skill:**

- methods of statistical control and product quality management;
- skills in working with technical regulations;
- rules, procedures and procedures for confirming the conformity of products, processes, services (works), personnel competence, management systems in welding production.

#### **3. Competencies being developed**

- Know the normative and technical documentation on certification and certification procedures in welding production. Have an idea of the methods for training specialists in welding production in the system of current norms and regulations of the Republic of Belarus and foreign countries.

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

To assess the quality of students' assimilation of educational material, including acquired competencies, ongoing certification is carried out during training sessions based on the results of completing and defending practical work, as well as writing a test. Interim certification of students is carried out based on the results of the current certification and includes an exam.

Current certification is carried out in the form of defense of practical work in oral form and control work in written form (test tasks). Interim certification is carried out in the form of an oral and written exam.