

COMPUTER SIMULATION OF WELDING PROCESSES

ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty: 1-36 01 06 Equipment and technology of welding production

| | Form of higher education | | |
|--|--------------------------|----------------|-------------------------------|
| | Full-time (daytime) | Correspondence | Correspondence abbreviated |
| Well | 3 | 4 | 3 |
| Semester | 6 | 7 | 6 |
| Lectures, hours | 34 | 6 | 8 |
| Laboratory classes, hours | 16 | 4 | 4 |
| Report, semester | 6 | 7 | 6 |
| Classroom hours per academic discipline | 50 | 10 | 12 |
| Independent work, hours | 58 | 98 | 96 |
| Total hours per academic discipline / credit units | 108/3 | 108/3 | 108/3 |

1. Brief content of the discipline

The purpose of teaching the discipline is to develop students of the specialty 1-36 01 06 "Equipment and technology of welding production" of ideas, knowledge and skills in the composition and capabilities of modern application programs for computer simulation of processes taking place in welding production.

2. Learning outcomes

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

know:

- main goals, tasks and stages of modeling;
- basic methods of computer modeling for tasks in the production of welded structures;
- modern applied software products for computer modeling of welding processes.

be able to:

- create mathematical and computer models of welding processes;
- use applied software products for the implementation of these models;
- use the techniques of safe work with technical means in computer modeling.

own:

- computer simulation methods in solving problems of welding production using modern software and hardware;
- methods of safe work with technical means when solving problems of welding production by computer simulation methods.

3. Formed competencies

SC-10 Master the basic principles of design, design methods and calculation of welded structures using modern computer-aided design systems

4. Requirements and forms of current and intermediate certification.

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