ENGINE DESIGN OF WELDED STRUCTURES
(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	3,4	4	3,4
Semester	6, 7	7, 8	6, 7
Lectures, hours	68	12	12
Practical (seminar) classes, hours	68	8	12
Classroom examination (semester, hours)	7	8	7
Course project, semester	–	7 (2 hours)	–
Credit, semester	7	8	7
Exam, semester	6	7	6
Classroom hours per academic discipline	136	22	24
Independent work, hours	80	194	192
Total hours in academic discipline / credit units	216/6		

1. Brief content of the discipline
The purpose of the educational discipline is the development of students of the specialty 1-36 01 06 "Equipment and technology of welding production" of representations, knowledge and skills to determine the working conditions of various welded structures, modern methods for calculating and rational design, as well as methods of improving the efficiency of welded structures, with by consideration of the compliance with the requirements for a reduction in material and resource intensity.

2. Learning outcomes
As a result of mastering the academic discipline, the student must

know:
The main types and characteristics of materials used in the manufacture of welded structures; basic principles for designing welded structures; the procedure for the formation of a new production facility and the proportion of welded structures in it; the procedure for detecting workloads affecting the product as a whole and welded items of the product.

be able to:
Choose materials taking into account the requirements for the welded design; apply typical calculations when designing; evaluate the manufacturability of the designed design and the possibility of its manufacture in real production conditions.

own:
Method of typical calculations applied at the design stage of welded structures; methodology for the formation of an optimal technological process that minimizes welding deformations and stresses; the method of design selection of the method of welding, depending on the nature of production.

3. Formed competencies
SC-7: To master the technologies for the production of welded structures for various purposes, auxiliary equipment, the principles of calculating structures and equipment for strength and manufacturability, taking into account the specifics of production.

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.