"TECHNOLOGICAL EQUIPMENT"
ANNOTATION
TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION

Specialty 1-36 01 01 "Engineering technology", 1-53 01 01 – "Automation of technological processes and production"

	Form of higher education		
	Full-time (day)	Correspondence	Part-time abbreviated
Course	3	4	3
Term	5	7	5
Lectures, hours	50	8	6
Laboratory classes, hours	16	4	4
Term paper, semester	5	7	5
Exam, semester	5	7	5
Classroom hours for the academic discipline	66	12	16
Independent work, hours	42	96	92
Total hours of academic discipline / credits	108/3	108/3	108/3

1. Summary of the academic discipline

The purpose of the discipline is for students to study the theoretical foundations, calculation principles and design methods of various devices and auxiliary tools. This will allow them to consciously and creatively create workable and high-performance technological equipment.

2. Learning outcomes

A student who has studied the discipline should know:
– the basics of the theory of basing and the principles of installing blanks in devices;
– methods of designing various types of devices;
– types and design features of devices for various types of machining;
– methods of power calculation of devices;
– the procedure for economic justification of the feasibility of using technological equipment.
A student who has studied the discipline should be able to:
– design devices for various types of processing and assembly;
– correctly use the recommendations of reference books, engineering norms and standards;
– to ensure the required accuracy of the workpiece processing in the device;
– if necessary, provide mechanization to the automation of the device;
– to evaluate the effectiveness of the device, its condition during operation;
– to conduct an economic justification of the choice of the device design.
A student who has studied the discipline must possess:
– methods of calculation and design of technological equipment in accordance with the tasks set;
– skills in using reference literature and standards;
– skills necessary for independent solution of tasks in the field of technological equipment design both during the course and diploma projects, and in his future professional activity.

3. Formed competencies

Codes of formed competencies	The names of the competencies being formed
SK -3	Be able to design individual components and metal-cutting machines as a whole, elements of hydraulic and pneumatic drives, as well as hydraulic and pneumatic automatics, adaptations to these machines of various types, while using modern equipment control systems.
SK -10	Be able to design adaptations to machines of various technological groups.

4. Requirements and forms of current and interim certification

The current and intermediate certification are carried out in written and oral-written form through the protection of laboratory work, control work, course work; passing the exam.