

# CNC MACHINING TECHNOLOGY

## ANNOTATION

### TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-53 01 01 Automation of technological processes and production (by directions)

	Form of higher education
	Full-time (daytime)
Course	4
Semester	7, 8
Lectures, hours	52
Practical (seminar) classes, hours	18
Laboratory classes, hours	50
Exam, semester	7, 8
Classroom hours in the academic discipline (including hours for guided independent work)	120
Independent work, hours	88
Total academic hours / credits	208/6

#### **1 Synopsis of the discipline**

The discipline "Technology of machining on CNC machines» contains information on the features of the use of technological equipment equipped with numerical control devices in existing and projected technological processes.

#### **2. Learning outcomes**

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

##### **To know:**

- technological capabilities of various groups of CNC machines;
- features of designing technological processes of processing using CNC machines;

##### **can:**

- develop control programs for machining parts on CNC machines;
- rational use of the capabilities of CNC equipment;
- perform rationing of operations carried out on CNC equipment;

##### **possess:**

- design features of machining operations on CNC machines and machine tools;
- skills in developing the text of control programs for CNC machines.

#### **3 Competencies to be formed**

The development of this academic discipline should ensure the formation of their **next** competencies.:

SK-12 Be capable of choosing methods for obtaining blanks of machine parts, developing drawings of blanks, choosing methods for processing blanks, necessary equipment and tooling, calculating allowances, cutting modes, the number of machines and their loading, conducting dimensional calculations of technological processes

SK-12.3 To know the methods of encoding technological information, the composition and structure of the control program frames, the coordinate systems of CNC machines and their interrelations, the programming of processing on various CNC machines.

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

Current and intermediate certification is carried out in written and oral-written form through tests, reports on laboratory work with their oral defense, tests, written examinations.