CNC MACHINING TECHNOLOGY

(course title)

COURSE SYLLABUS ABSTRACT

6-05-0714-02 Mechanical Engineering Technology, Metal-Cutting Machines and Tools
Concentration: Mechanical Engineering Technology, Equipment and Technologies for Highly Efficient Processing Processes
6-05-0713-04 Automation of Technological Processes and Production
Concentration: Automation of Technological Processes and Production in Mechanical Engineering

	STUDY MODE				
	Automation of Technological Processes and Production in Mechanical Engineering	Equipment and Technologies for Highly Efficient Processing Processes	Mechanical Engineering Technology		
	full-time	full-time	full-time	part-time	part-time (shortened program)
Year	4	4	4	4, 5	3, 4
Semester	7,8	7,8	7,8	8, 9	6, 7
Lectures, hours	52	52	52	12	12
Practical classes (seminars), hours	18	18	18	4	4
Laboratory classes, hours	52	46	52	12	12
In-class test (semester, hours)				8 semester (2 hours)	6 semester (2 hours)
Pass/fail, semester	-	-	7	8	6
Exam, semester	7, 8	7, 8	8	9	7
Contact hours	122	116	122	30	30
Independent study, hours	94	136	116	208	208
Total course duration in hours / credit units	216/6	252/7	238/7		

1. Course outline

The discipline "Machining Technology on CNC Machines" contains information about the features of the use of technological equipment equipped with numerical control devices in existing and designed technological processes.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- technological capabilities of various groups of CNC machines;
- Features of the design of technological processes of processing using CNC machines;

be able to:

- develop control programs for processing parts on CNC machines;
- rationally use the capabilities of CNC equipment;
- To perform the standardization of operations carried out on CNC equipment;

to possess a skill:

- designing machining operations on CNC machines and machine complexes;
- development of the text of control programs for CNC machines.

3. Competencies

Know the methods of encoding technological information, the composition and structure of the control program frames, the coordinate systems of CNC machines and their interconnections, the programming of processing on various CNC machines. (6-05-0714-02 concentration: Mechanical Engineering Technology, 6-05-0713-04)

To be able to ensure a high level of automation in the design of technological processes, and to know the principles and types of automated process control systems (6-05-0714-02 concentration: Equipment and Technologies for Highly Efficient Processing Processes)

4. Requirements and forms of midcourse evaluation and summative assessment

The current and intermediate attestation is conducted in written and oral-written form through reports on laboratory and practical work with their oral defense, control papers, and written exams.