PRE-GRADUATION INTERNSHIP
COURSE SYLLABUS
ABSTRACT

Specialty 6-05-0713-04 Automation of technological processes and productions
specialization Automation of technological processes and productions in mechanical engineering

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	4	-	-
Semester	8	-	-
Total course duration in hours / credit units	162 / 4	-	-

1. Internship course outline (aims and objectives)

The purpose of the undergraduate internship are:

– formation of students of the specialty 6-05-0713-04-1.1 « Automation of technological processes and productions», profiling « Automation of technological processes and productions in mechanical engineering» skills of independent work on the analysis of existing and development of new technological processes for manufacturing machine-building products;

– students acquire practical skills and abilities and prepare them for independent professional activity in their specialty.

The objectives of the undergraduate internship are:

– acquisition by students of professional skills in their specialty, consolidation, expansion and specialization of knowledge acquired in previously studied disciplines;

– the study of technological processes for the manufacture of parts, assemblies and all stages of their production, starting from the production of blanks and ending with the assembly and testing of assemblies and machines;

– familiarization with the tasks of enterprises and organizations in Mogilev, the organizational structure of various organizations / enterprises, the forms of organization of the production process and its technological support.

2. Course learning outcomes

Learning outcomes:

- **to consolidate theoretical knowledge** the basics of developing new technological processes for manufacturing machine-building products;
- **to master practical skills** to create new technological processes for manufacturing machine-building products;
- **to develop practical expertise** new skills in designing technological processes.

3. 3.Competencies:

Should be able to use computer technology and mathematical methods to solve engineering problems in the field of mechanical engineering (development of drawings, automation of design of structures and technologies, etc.). Should know the sources of errors in mechanical processing, methods for calculating and reducing processing errors, designing technological processes for machining parts and assembling machines. Should be able to select methods for obtaining blanks of machine parts, develop drawings of blanks, select methods for processing blanks, necessary equipment and tooling, calculate allowances, cutting modes, the number of machines and their loading, and perform dimensional calculations of technical processes. Should be able to choose methods and means of automating various processes of manufacturing machine parts and assemblies for specified production conditions. To have knowledge of modern database design automation tools, to be able to organize data access, and to choose a remote database architecture based on the requirements of a specific task.

4. Form of midcourse evaluation

Intermediate certification is carried out in writing through the preparation of reports, as well as by conducting differentiated test.