# TECHNOLOGICAL PROCESSES OF MATERIAL PROCESSING AND MACHINE ASSEMBLY

(name of discipline)

### **COURSE SYLLABUS ABSTRACT**

**Specialty** 6-05-0714-02 – Mechanical engineering technology, metal-cutting machines and tools **Concentration** Equipment and technologies for highly efficient material handling processes

	STUDY MODE full-time
Year	3,4
Semester	6, 7, 8
Lectures, hours	118
Practical classes (seminars), hours	16
Laboratory classes, hours	102
Exam, semester	6, 7
Course paper, semester	8
Contact hours	236
Independent study, hours	220
Total course duration in hours / credit units	456/13

#### 1 Course outline

The objective of the academic discipline is to study the general provisions on the relationships and patterns of technological processes, knowledge of which allows developing processes for the mechanical processing of parts and the assembly of machines and devices that ensure their quality at the highest level of labor productivity and the lowest cost of manufacturing products.

# 2. Course learning outcomes

Upon completion of the course, students will be expected to

## know:

- methodology and methods for designing technological processes for mechanical processing of parts and assembly of machines;
  - methods and means for automating assembly operations and processes;
- features of determining the economic efficiency of technological processes for assembling machines;
  - equipment and tools used in processing and assembling machines;

#### be able to:

- develop route technological processes for processing and assembling machine units;
- analyze the economic efficiency of adopted technological solutions;
- prepare technological documentation;

# to possess a skill:

- selection of rational modes of processing products and time standards during the development or modernization of technological processes, as well as methods of preparing technological documentation, including with the help of computer technology.

# 3 Competencies

Mastering this training discipline should ensure the formation of the following competence: to master methods of selecting rational modes of processing products and time standards during the development or modernization of technological processes, as well as methods of drawing up technological documentation, including with the help of computer technology

# 4 Requirements and forms of midcourse evaluation and summative assessment

Current and intermediate certification are conducted in written and oral-written form through tests, reports on laboratory work with their oral defense, reports on practical work with their oral defense, tests, test assignments, and written exams.