

# **DESIGN AND PRODUCTION OF BLANKS**

(course title)

## **COURSE SYLLABUS ABSTRACT**

**Speciality:** 1-53 01 01 – «Automation of technological processes and production».

**Specialisation** 1-53 01 01-01 – Automation of technological processes and production (mechanical engineering and instrumentation)

	STUDY MODE
	full-time
Year	3
Semester	5
Lectures, hours	34
Practical classes (seminars), hours	16
Laboratory classes, hours	16
Pass/fail, semester	5
Contact hours	66
Independent study, hours	42
Total course duration in hours / credit units	108/3

### 1. Course outline.

The purpose of the discipline is to outline the principles of choosing the most rational way of producing blanks, ensuring their high quality at minimal cost.

### 2. Course learning outcomes.

As a result of mastering the academic discipline, the student should know:

- principles for selecting blanks for machine parts for given operating conditions and production of parts;

- the possibility of various methods for obtaining blanks;

- the main directions of development of methods for obtaining blanks;

be able to:

- make a reasonable choice of the part blank for the given conditions of its operation and production;

- calculate allowances and tolerances for workpiece surfaces;

- develop and draw up a drawing of the workpiece for various methods of its production;

possess:

- methodology for designing various types of blanks for machine parts;

- skills and technical means for assessing the quality of blanks in a production environment;

- methods of economic substantiation of a rational type of blank for given production conditions.

### 3. Competencies.

Mastering this academic discipline should ensure the formation of the following competencies:

CK-12.1: To know the principles of choosing methods for obtaining blanks for machine parts for various operating conditions and production of machines, modern methods for obtaining blanks, the rules for creating and designing their drawings.

### 4. Requirements and forms of midcourse evaluation and summative assessment.

To assess the level of knowledge of students, the following diagnostic tools are used: oral and written survey during practical classes; written reports on laboratory work with their oral defense; submission of an account.