

# **DESIGN AND PRODUCTION OF BLANKS**

(course title)

## **COURSE SYLLABUS ABSTRACT**

**Speciality:** 1-36 01 04 «Equipment and technologies for highly efficient material processing processes».

	STUDY MODE
	full-time
Year	3
Semester	5
Lectures, hours	34
Practical classes (seminars), hours	16
Laboratory classes, hours	16
Exam, 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-4: Be able to apply in technological design modern methods for obtaining blanks, manufacturing fixtures and processing machine parts.

### 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; exam.