**INFORMATICS**
(course title)

# COURSE SYLLABUS ABSTRACT
# of higher education institution
# speciality

## 1 - 36 01 04 - "EQUIPMENT AND TECHNOLOGIES FOR HIGHLY EFFICIENT MATERIAL PROCESSING PROCESSES

_____
(speciality code and name)

| | STUDY MODE | | |
|---|---|---|---|
| | full-time | part-time | part-time (shortened program) |
| Year | **1** | | |
| Semester | 1 | | |
| Lectures, hours | 34 | | |
| Laboratory classes, hours | 50 | | |
| Exam, semester | 1 | | |
| Contact hours | 84 | | |
| Independent study, hours | 36 | | |
| Total course duration in hours / credit units | 120/3 | | |

1. Course outline

The purpose of the discipline is to teach students modern information technologies and means of converting, processing, storing and transmitting information

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

device and technical means of a personal computer; system and application software; the basics of modern multimedia and network technologies, their means and capabilities; basics of algorithmization of engineering problems; at least one programming language and the main methods of its use;

be able to:

work in the Microsoft Windows operating system environment; use packages of standard office programs, including Microsoft Word processor, Microsoft Excel spreadsheet processor, Microsoft Power Point presentation tools; apply packages of special programs for mathematical purposes; build mathematical models and develop algorithms for solving applied problems; implement algorithms in the form of your own programs in the Visual Basic for Application programming language; use programming skills in professional activities;

possess:

methods of algorithmization of engineering problems; skills of practical creation and support of the functioning of automated workstations based on personal computers; methods of managing programs, data and equipment based on modern operating systems for personal computers.

3. Competencies

BPC -3. Be able to search, store, process and analyze information, present it in the required form using information, computer and IT technologies

4. Requirements and forms of midcourse evaluation and summative assessment

When studying the discipline, a module-rating system for assessing students' knowledge is used. The following forms of conducting classes are used: traditional lectures and multimedia lectures, problem / problem-oriented laboratory classes using a computer. Based on the results of laboratory work, their protection is provided.