

BASICS OF COMPUTER TECHNOLOGIES
ANNOTATION
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Speciality 1-36 01 04 – Equipment and technologies for highly efficient material processing processes

	Form of higher education
	Full-time (daytime)
Course	1
Semester	2
Laboratory classes, hours	34
Test, semester	2
Classroom hours in the academic discipline	34
Independent work, hours	16
Total hours per academic discipline / credit units	50

1 Brief content of the discipline

– The discipline "Fundamentals of Computer Technologies" teaches students the basics of building two-dimensional and three-dimensional models using complex systems for automating design procedures for modeling and analysis.

2. Learning outcomes

As a result of studying the academic discipline, the student must:

know:

- principles and methods for creating two-dimensional and three-dimensional wireframe, surface and solid-state geometric models of mechanical engineering objects using CAD-systems;
- principles, methods and rules for using integrated programming systems to automate design procedures for modeling and analyzing engineering objects;

be able to:

- create two-dimensional and three-dimensional wireframe, surface and solid-state geometric models of mechanical engineering objects in the environment of CAD-systems;
- develop, using integrated programming systems, automated design procedures for modeling and analyzing engineering objects;

own:

- skills of three-dimensional modeling in CAD-systems and construction of graphic documentation on their basis;
- Skills in editing 3D models.

3. Formed competencies

Codes of generated competencies	Names of competencies being formed
BPK -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 current and intermediate certification

Current and intermediate certification is carried out orally by preparing reports on laboratory work and their oral defense, as well as by conducting oral tests.