

Information technology in mechanical engineering
(course title)

COURSE SYLLABUS ABSTRACT

1-36 01 03 – Machine-building process equipment
(speciality code and name)

	STUDY MODE
	full-time
Year	2
Semester	3
Lectures, hours	34
Laboratory classes, hours	16
Pass/fail, semester	3
Contact hours	50
Independent study, hours	94
Total course duration in hours / credit units	144/4

1. Course outline

Modeling. Mathematical software packages. Geometric modeling in the CAD environment. CAD interface. Solid modeling tools. Surface modeling. Synchronous technology. Modeling assemblies. Modeling a part in the context of an assembly. Creating Drawings.

2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- modern methods of formalizing a number of logical, computational and design problems;
- methods of setting and algorithmization of local problems of design design and design of technological processes as a whole;

- methods for optimizing design problems;

be able to:

- formalize design and technological tasks;
- configure universal computer programs.

possess:

- methods of computer modeling of technological processes;
- methods of using standard programs for solving design and technological problems.

3. Competencies

BPK-4 – Have the skills to effectively use application packages and programs to automate engineering calculations.

4. Requirements and forms of midcourse evaluation and summative assessment

- verbal-written: laboratory protection, test.