

Research and testing of process equipment

(course title)

COURSE SYLLABUS ABSTRACT

1-36 01 03 – Machine-building process equipment

(speciality code and name)

	STUDY MODE
	full-time
Year	4
Semester	7
Lectures, hours	34
Laboratory classes, hours	16
Pass/fail, semester	7
Contact hours	50
Independent study, hours	58
Total course duration in hours / credit units	108/3

1. Course outline

Indicators of process equipment. Rigidity of process equipment. Thermal deformations of equipment forming links. Bearing systems of process equipment. Reliability of process equipment. Technical aesthetics requirements. Testing of process equipment. Supports. Process equipment control systems. Grease. Chip removal devices.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

methods of maintenance tests; methods for development and analysis of dynamic maintenance models; systems for automation of experimental maintenance studies;

be able to:

formulate the tasks of research and testing of maintenance; use the appropriate method to solve a specific problem;

possess:

basic principles of analysis and construction of dynamic models of maintenance.

3. Competencies

SK-5 – Be able to perform standard tests of machines for accuracy and rigidity, conduct studies of vibration resistance and thermal behavior using modern equipment, experimental planning methods and mathematical processing of results.

4. Requirements and forms of midcourse evaluation and summative assessment

– verbal-written: laboratory protection, test.