

# QUALITY MANAGEMENT IN MECHANICAL ENGINEERING

(name of discipline)

## ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-36 01-Technology of Mechanical Engineering, 1-53 01-Automation of technological processes and productions

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	4	5	4
Semester	8	9	7
Lectures, hours	18	4	4
Practical classes (seminars), hours	18	4	4
Pass/fail, semester	8	9	7
Contact hours	36	8	8
Independent study, hours	64	92	92
Total course duration in hours / credit units	100/3	100/3	100/3

### 1. Course outline

The discipline "Quality management in mechanical engineering" contains general ideas about issues related to ensuring, managing, improving the quality of engineering products on the basis of quality control and management systems used in world practice.

### 2. Course learning outcomes

Upon completion of the course, students will be expected to

#### know:

- stages of development and principles of quality systems;
- theoretical aspects of the scientific approach to quality management of products, works and services;
- the structure of international and national quality standards;
- the content of quality management functions at the enterprise and the main methodological approaches to their implementation;
- modern methods for assessing the quality level of products in mechanical engineering;

#### be able to:

- qualitatively use normative and organizational and methodical documentation related to the evaluation of quality systems;
- apply the basic principles of quality management systems at the enterprise
- analyze and evaluate the product quality level at an enterprise; apply information technologies of quality management
- apply information technologies of quality management;

#### possess:

- modern methods for assessing the quality of products in mechanical engineering;
- methodological approaches to the implementation of quality management;
- methods of planning, accounting and analysis of product quality costs.

### 3. Competencies

Mastering this discipline should ensure the formation of the following competence:

SK-2.2 Know the basic principles of formation and structure of quality management systems based on ISO9000 standards, basic methods of quality management, certification of products and quality management systems. For 1-53 01 01: SC-9.2 Know the basic principles of the formation and structure of quality management systems based on ISO9000 standards, the basic methods of quality management, product certification and quality management systems.

### 4. Requirements and forms of midcourse evaluation and summative assessment

Current and interim evaluations are conducted in written form through tests, quizzes, and written credit.