

TECHNICAL MEASUREMENTS AND INSTRUMENTS
(course title)

COURSE SYLLABUS ABSTRACT

7-06-0714-02 Innovative technologies in mechanical engineering
(speciality code and name)

Computer engineering of transport and technological machines
(concentration)

Advanced higher education

	STUDY MODE	
	full-time	part-time
Year	2	2
Semester	3	4
Lectures, hours	16	4
Laboratory classes, hours	34	8
Exam, semester	3	4
Contact hours	50	12
Independent study, hours	150	188
Total course duration in hours / credit units	200/6	

1. Course outline

The purpose of the discipline is to form specialists who can reasonably and effectively apply existing and master new knowledge and skills when conducting technical measurements.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- methods of measuring various parameters of technological processes;
- the main types of measuring instruments;
- regulatory documents regulating technical measurements;
- methods of processing measurement results;

be able to:

- use technical documentation to ensure the uniformity of measurements;
- to determine the static and dynamic characteristics of the devices;
- select tools and methods for measuring process indicators;
- to choose rational methods and means of determining the operational characteristics of equipment, automation tools and systems and their technical equipment;
- organize measurements;
- process measurement results;

to possess a skill:

- using the documentation of the measurement uniformity system;
- organization and carrying out of technical measurements;
- processing of measurement results.

3. Competencies

- Have the skills to conduct scientific research on transport and technological machines

4. Requirements and forms of midcourse evaluation and summative assessment

The technical form of the intermediate certification is an exam, the oral form of the current certification is an interview for the protection of laboratory work.