

FUNDAMENTALS OF DESIGNING TOOLS AND DEVELOPING METHODS FOR
DETERMINING THE TECHNICAL CONDITION OF VEHICLE SYSTEMS AND
MECHANISMS

COURSE SYLLABUS ABSTRACT

Speciality 1-37 80 01 «Vehicles»

Profiling Technical operation of vehicles

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	2	2
Lectures, hours	40	10
Practical classes (seminars), hours	16	4
Laboratory classes, hours	16	4
Exam, semester	2	2
Contact hours	72	18
Independent study, hours	108	162
Total course duration in hours / credit units	180/6	

1. Course outline

Formation of a sustainable system of knowledge, skills and professional competencies in the field of technological equipment and tooling for the mechanization of the processes of technical operation of motor vehicles, their units and tools (working bodies)

2. Course learning outcomes

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

modern achievements of science and technology in the field of creating technical solutions, production and operation of technological equipment;

methods and techniques of engineering analysis of design solutions of technological equipment objects;

methods of its design and optimization;

be able to:

analyze the modes and operating conditions of technological equipment facilities;

design a control system and elements of devices for maintenance and repair of cars;

apply a systematic approach when conducting patent and information research;

possess:

methods of designing the main elements of equipment for maintenance and repair of cars;

methods of analytical calculation of optimal characteristics of technological equipment;

rules for the operation of objects of technological equipment of a motor transport organization/

3. Competencies

SK-5 Own methods and means of determining the technical condition of vehicles and their components

4. Requirements and forms of midcourse evaluation and summative assessment

oral-written form: reports on practical works with their oral defense, reports on laboratory work with their oral protection, exam.