

OURSE SYLLABUS ABSTRACT

1-37 01 06 "Technical operation of vehicles (by directions)"

(speciality code and name)

1-37 01 06 "Technical operation of vehicles (public and personal vehicles)

(specialisation code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	2	2,3	2
Semester	3,4	4,5	3,4
Lectures, hours	68	14	16
Practical classes (seminars), hours	32	8	8
Laboratory classes, hours	32	8	8
In-class test (semester, hours)	–	4 (2 hours)	–
Pass/fail, semester	4	5	4
Exam, semester	3	4	3
Contact hours	132	30	32
Independent study, hours	108	210	208
Total course duration in hours / credit units	240/6		

1. Course outline

The discipline belongs to the cycle of general professional and special disciplines, the state component. The purpose of the academic discipline is to form students' skills in calculating typical structural elements, mechanical transmissions, working bodies of machines and mechanisms for strength, rigidity, stability and durability.

2. Course learning outcomes

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

- the main hypotheses of mechanics of materials about the properties of structural materials and the nature of deformation;
- general requirements for structural materials;
- methods for calculating typical structural elements for strength, rigidity and stability ;
- methods of experimental study of stresses and strains;

be able to:

- apply in practice methods and approaches to solving engineering problems of calculating structures , parts and assemblies of machines for strength, rigidity and stability;
- investigate stresses and strains by experimental methods;
- to carry out the formulation of tasks, taking into account the complex operational conditions of the functioning of the object under study;

own:

- methods of theoretical and experimental analysis of structures for strength, rigidity and stability, taking into account the properties of structural materials;
- methods of structural analysis for their optimal use.

3. Competencies

BOD–9 Perform calculations for strength, rigidity and stability of structures

4. Requirements and forms of midcourse evaluation and summative assessment

Exam, Pass/fail