

# VEHICLE OPERATIONAL RELIABILITY STUDY

(наименование дисциплины)

## ADVANCED SOLUTIONS IN THE DESIGN OF VEHICLES

### **COURSE SYLLABUS ABSTRACT**

**Speciality 1-37 80 01 «Vehicles»**

**Profiling Technical operation of vehicles**

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1	1
Lectures, hours	36	8
Practical classes (seminars), hours	18	8
Exam, semester	1	1
Contact hours	54	16
Independent study, hours	146	184
Total course duration in hours / credit units	200/6	

#### 1. Course outline

The tasks of the discipline are the study and analysis of methods for studying the theory of reliability and operational properties, the functioning of mechanisms, systems and technological equipment.

#### 2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

general design and classification of modern and future motor vehicles (MV); purpose, classification, device and principles of operation of units, systems, mechanisms, units.

be able to:

apply the acquired knowledge in the technical operation (TO) of the MV; assess the structural excellence of the MV;

possess:

methods of collecting and analyzing information on the design features, operation and operating rules of modern and future MVs; methods of functional calculation of MV elements, as well as methods for determining the parameters of the MV movement;

#### 3. Competencies

SK-1 Possess knowledge of the theory of functioning of mechanisms and systems of vehicles, the theory of reliability and operational properties, technological equipment for maintenance and TR of vehicles and be able to apply them in the design of the production and technical base of OAT enterprises

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

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