

ADVANCED SOLUTIONS IN THE DESIGN OF VEHICLES

COURSE SYLLABUS ABSTRACT

Speciality 1-37 80 01 «Vehicles»

Profiling Wheeled Vehicle Design

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1	1
Lectures, hours	36	8
Practical classes (seminars), hours	18	4
Exam, semester	1	1
Contact hours	54	12
Independent study, hours	54	96
Total course duration in hours / credit units	108/3	

1. Course outline

The tasks of the discipline are the study and analysis of the designs of promising vehicles.

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-3 To be able, on the basis of scientific research and world trends in the automotive industry, to develop projects of the production and technical base (PTB) of OAT for the organization of maintenance and TR of promising vehicles (electric transport, hybrid vehicles, "unmanned" vehicles, vehicles on a magnetic cushion and other solutions).

4. Requirements and forms of midcourse evaluation and summative assessment
oral-written form: reports on practical works with their oral defense, exam.