BASIS OF SCIENTIFIC RESEARCH AND INNOVATION ACTIVITY
(course title)

COURSE SYLLABUS ABSTRACT
of higher education institution speciality

1-37 01 07 "Vehicle Service"
(speciality code and name)

	STUDY MODE	
	full-time	part-time (shortened program)
Year	2	2
Semester	4	4
Lectures, hours	34	10
Practical classes (seminars), hours	16	4
Laboratory classes, hours	34	4
In-class test (semester, hours)		1
Course paper, semester	4	5
Exam, semester	4	4
Contact hours	84	18
Independent study, hours	46	112
Total course duration in hours / credit units	130/3	

1. Course outline
The discipline contains the main theoretical and methodological foundations for scientific research and innovation to ensure scientific and technological progress and solve engineering and socio-economic problems.
2. Course learning outcomes
Upon completion of the course, students will be expected to
know:
goals and objectives of fundamental and applied research; methodological foundations of experimental work; innovative laws and goals of innovative activity; fundamentals of correlation and regression analysis, the theory of planning experiments and making optimal decisions; fundamentals of the theory of queuing and the possibility of its use for solving problems of technical operation; content, methods of innovation and the basis of its organization; methods of innovative design and business planning; foreign and domestic experience in the field of innovations in the specialty.
be able to:
process statistical data and use them in practical work; use the theory of planning experiments, the theory of queuing and the theory of reliability, correlation-regression models in research on technical operation; use the methods of organizing and conducting scientific research in the field of transport; analyze new technologies, equipment, projects and solutions in order to assess their innovative potential; determine the competitiveness of products; determine the goals of innovation and ways to achieve them; apply methods of analysis and organization of innovations.
possess:
methodological foundations of experimental work; methodological foundations for conducting theoretical research based on modeling; methods of innovative design and planning of scientific developments.
3. Competencies
SC - 12 Be able to apply information support and interfaces of automated information systems of a car service.
4. Requirements and forms of midcourse evaluation and summative assessment
- Oral and written: reports on classroom practical exercises with their oral defense; reports on laboratory work with their oral defense; term papers with their oral defense; exam.