## BRIDGES AND ROAD STRUCTURES (course title) COURSE SYLLABUS ABSTRACT of higher education institution speciality

Specialty 1-70 03 01 Road Construction

		STUDY MODE		
	full-time	part-time	part-time (shortened program)	
Year	4	4, 5	3	
Semester	7, 8	8, 9	6	
Lectures, hours	82	12		
Practical classes (seminar), hours			4	
Laboratory classes, hours	18	8		
Course project, semester	8	9	6	
Offset, semester	7	8		
Exam, semester	8	9		
Contact hours	100	20		
Independent study, hours	92	172		
Total course duration in hours / credit units	192/5			

1. Course outline. The academic discipline contains materials on the design and construction of modern transport facilities on highways.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

the main types of transport structures on the roads, the main methods of calculating the elements of transport structures, methods of manufacturing and installation of bridge structures; be able to:

perform the calculation and design of superstructures, supports and pipes, work with regulatory and scientific and technical literature, make maximum use of computers, know their capabilities;

possess:

methods for determining the geometric dimensions of bearing structures of bridge structures, depending on the type of load acting on the structure.

3. Competencies

PC-4 To compose a general scheme of construction, construction of elements and assemblies, taking into account the results of research and development work. II-5 To know the construction of mathematical models of spatial calculations of transport structures, apply methods of structural mechanics and mechanics for calculations, including using numerical methods and conducting automated calculations. IIK-6 Perform structural calculations of elements of highways and transport structures, taking into account regulatory documents.

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

ZLR - protection of laboratory work;

ZIZ - protection of an individual task;

PKU - intermediate control of academic performance;

TA - is the current certification.