

BUILDING STRUCTURES OF TRANSPORT STRUCTURES

(course title)

COURSE SYLLABUS ABSTRACT

7-07-0732-01-2 "Construction of buildings and structures"

(speciality code and name)

Highways

(concentration)

	STUDY MODE	
	full-time	part-time (shortened program)
Year	3	3
Semester	6	6
Lectures, hours	34	8
Practical classes (seminars), hours	16	4
Laboratory classes, hours	16	4
Pass/fail, semester	6	6
Contact hours	66	16
Independent study, hours	78	128
Total course duration in hours / credit units	144/4	

1. Course outline: 1. Engineering structures on roads - their purpose. 2. Structural elements of buildings and structures. 3. Loads and impacts on buildings and structures. 4. Structures made of reinforced concrete, stone, steel and wood. 5. Calculation of structures.

2. Course learning outcomes

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

- the role of the domestic school of calculation, design, research in the development of building structures; - the main properties and characteristics of structural building materials; - the scope of application of building structures in buildings and structures; - features of the operation of building structures in various operating conditions; - the method of calculating building structures by limit states; - the range of steels and lumber, standardized reinforced concrete products; - regulatory, mandatory and recommended literature.

be able to:

- to carry out an economic assessment and justification of the applied building structures in buildings and structures; - to determine the loads on the supporting structures of buildings and structures and to perform their calculations; - to carry out calculations of building structures, as well as their connections and joints, based on the developed structural schemes of buildings or structures; - to use a computer in calculations and design of building structures.

to possess a skill:

- using PCs in designing building structures and structures - using modern methods for calculating building structures and structures made of reinforced concrete, stone, wood, steel; - designing and calculating floors made of reinforced concrete, wood, steel; - designing and calculating columns, pillars, roof structures.

3. Competencies

- Carry out graphic constructions on a plane and in space to solve professional problems

4. Requirements and forms of midcourse evaluation and summative assessment Current certification of students is carried out to determine the compliance of the results of their educational activities with the requirements of educational standards, curriculum, documentation of educational programs of higher education. The forms of current certification of students are credit. Current certification is carried out in oral and written form. The form of interim certification is the defense of laboratory work, which is carried out in oral form.