

# ROAD CLIMATOLOGY

## ANNOTATION TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION

Specialty 1-70 03 01 Road of Construction

	Form of higher education		
	Full-time (day)	Correspondence	Correspondence abbreviated
Course	2	5	2
Term	4	10	3
Lectures, hours	16	4	4
Credit, semester	4	10	3
Contact hours	16	4	4
Independent study, hours	10	22	22
Total course duration in hours / credit units	26/1		

1. The purpose of studying the discipline is to focus students' attention on the problem of taking into account climatic factors in the practice of their future production or scientific activities, which will help save material and technical resources and protect the environment. Students studying the discipline should obtain from it general information about climatology, climatography and meteorology, study the influence of weather and climatic factors on roads and road structures, road transport, as well as on the technology of road works. Mastery of competencies, basic knowledge about the atmosphere, the physical and chemical processes occurring in it that shape the weather and climate, and the geographical patterns of manifestation of these processes within various zones and sectors of the globe.

2. As a result of mastering the discipline, the student must:

**know:**

- features of the influence of climatological factors on the performance of road construction machines and technological processes used in road construction; - engineering solutions that would provide the facilities with the necessary technical and operational qualities;
- recommendations that are necessary for the operation of roads in conditions of extreme natural phenomena, taking into account the peculiarities of weather and climatic factors;

**be able to:**

- use the laws of climatology in providing technology and organization of road construction and repair work.

**own:**

- section of mathematics "Fundamentals of the theory of probability and mathematical statistics";
- section of physics "Force fields, conservation laws in mechanics";
- Fundamentals of general and engineering geology and hydrogeology (soils and their classification, physical characteristics of soils).

3. Formed competencies. AK-1. Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems. PC-30. Analyze and evaluate collected data. PC-31. Prepare reports, materials for presentations and represent them. PC-32. Use global information resources.

4. Requirements and forms of current and intermediate certification. For the first intermediate attestation, a student is required to score 15 points, for the second - 36 points. For the current assessment of the student, a minimum of 51 points is required. The following forms are used to diagnose competencies: - technical form.