

## INTRODUCTION TO ENGINEERING EDUCATION

annotation

TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION

Specialty\_\_1-70 03 01 "Highways" \_\_\_\_\_

	<b>Form of training</b>
	<b>Full-time (day)</b>
<b>Course</b>	2
Semester	3
Lectures	16
Credit	3
<b>Classroom hours</b>	16
Total hours / credits	16

1. The discipline "Introduction to the specialty" is read for 2nd year students of the specialty 1-70 03 01 "Highways". Students studying the discipline should get from it general information about the road construction specialty, the technique of teaching at the university, about the history of road construction, get acquainted with the main directions of technical progress in the construction and operation of highways, briefly consider the highway as a complex of complex engineering structures requiring knowledge of fundamental and applied disciplines, delve into the essence engineering creativity, in relation to their specialty.

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

know: - general information about transport, classification of modes of transport, social and economic significance of highways; - information about the Belarusian-Russian University, the importance of lectures for a future engineer, methods of preparation for exams and tests, be able to take notes of lecture material; - history of road development and road construction; -to present a modern highway as a complex of complex engineering structures and to see unresolved problems in the road industry; - understand the place of an engineer in modern life, the properties necessary for a qualified engineer, know the process of designing engineering facilities; be able to: -work with scientific, technical and reference literature; -prepare reports, materials for presentations and make a presentation; -work independently; -to search, systematize and analyze information on the prospects for the development of the industry, innovative technologies, projects and solutions,

possess: - practical skills related to the use of technical devices, information management and computer work - terminology adopted in the practice of designing, construction and operation of highways.

3. As a result of mastering the discipline, the student should have the following competencies:- AK-1 To be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems; AK-4 To be able to work independently;- - AK-8 To have oral and written communication skills; - SLK-2 To be capable of social interaction; - SLK-3 To have the ability to interpersonal communication; - SLK-4 Be able to work in a team; - PC -29 Interact with specialists of related professions. – PC-31 Prepare reports, materials for presentations and represent at them.; PC-39 To search, systematize and analyze information on industry development prospects, innovative technologies, projects and solutions; PC-41 To work with scientific, technical and patent literature.

4. Requirements and forms of current and interim certification.

The following forms are used to diagnose competencies:

- oral (conference reports, oral credit);
- written (abstracts, assessment based on a modular rating system);
- oral-written (assessment based on a modular rating system..

To assess the level of knowledge of students, the following diagnostic tools are used:

- preparation of abstracts on individual topics.;
- passing the test;