

ECONOMIC AND MATHEMATICAL METHODS AND MODELS

(course title)

COURSE SYLLABUS ABSTRACT
of higher education institution
speciality

1-27 02 01 "Transport logistics"

(speciality code and name)

1-27 02 01-01 "Transport logistics (road transport)"

(specialisation code and name)

	STUDY MODE
	full-time
Year	2
Semester	4
Lectures, hours	34
Practical classes (seminars), hours	16
Laboratory classes, hours	16
In-class test (semester, hours)	-
Course paper, semester	-
Course project, semester	-
Pass/fail, semester	4
Exam, semester	-
Contact hours	66
Independent study, hours	42
Total course duration in hours / credit units	108/3

1. Course outline

The discipline is aimed at developing students' knowledge in the field of theory and practice, methods and tools for using the mathematical apparatus to solve problems in their professional field.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know: heuristic methods of modeling; network modeling methods; simulation, linear and dynamic programming; queuing models;

be able to: build economic and mathematical models corresponding to specific production situations; competently and effectively solve production and economic issues using modeling methods; conduct computational experiments on the model to prepare and select options for management decisions; apply methods of process optimization in the industrial and commercial sphere;

possess: technology of economic and mathematical calculations; manager skills.

3. Competencies

SC-6 - Master the basics of modeling production processes and network methods of planning and management to optimize production processes and traffic flows.

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

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

– oral form: interview during individual and group consultations; reports at the conference;

– written form: tests;

– oral-written form: oral and written questioning during practical classes; and protection of laboratory work; submission of an account.