Construction of Energy Efficient Buildings
(course title)

COURSE SYLLABUS ABSTRACT

_6-05-0732-02 "Real Estate Expertise and Management"__
(speciality code and name)

	STUDY MODE
	full-time
Year	4
Semester	7
Lectures, hours	34
Practical classes (seminars), hours	34
Exam, semester	7
Classroom hours per course	68
Independent study, hours	92
Independent study, hours	160/5

1. Course outline

1. Energy-saving construction programs in the construction of buildings 2. Energy-efficient building materials and products 3. Energy-saving architectural and planning solutions. 4. Thermal insulation of buildings 5. Energy-efficient technologies for thermal insulation of structural elements of buildings 6. Engineering systems of energy-efficient buildings 7. Resource-saving building technologies for energy-efficient buildings 8. Energy-efficient reconstruction of buildings.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know the requirements of technical regulations in the field of organization and technology of construction of energy-efficient buildings; requirements for the design of energy-efficient buildings; basic principles, patterns, rules and methods for the construction of buildings in an energy-efficient format;

be able to:

- select adequate space-planning and design solutions for energy-efficient buildings;
- develop options for organizational and technological schemes for constructing a facility in an energy-efficient format, assessing the effectiveness of each option;

to possess a skill to

- assessing the energy efficiency of buildings
- utilizing technological features for constructing energy-efficient buildings;
- developing detailed construction schedules.

3. Competencies

Master the fundamentals of research, search, analyze, and synthesize information; demonstrate initiative and adapt to changes in professional activities; apply technical regulations on the design of metal, reinforced concrete, stone, wood, and plastic structures to solve engineering and construction problems.

4. Requirements and forms of midcourse evaluation and summative assessment

Intermediate certification of students is carried out to determine the compliance of the results of their educational activities with the requirements of educational standards. The form of intermediate certification of students is not a differentiated test. Intermediate certification is carried out in writing.