

## Construction of Energy Efficient Buildings

ANNOTATION TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION  
Specialty 7-06-0732-01 "Construction" profiling "Industrial and civil construction" in-depth  
higher education

Type of work	Form of higher education	
	Full-time (full-time)	Correspondence
Course	1	2
Semester	2	3
Lectures, hours	34	8
Practical (seminar) classes, hours	16	4
Credit (semester)	2	3
Classroom hours in the academic discipline	50	12
Independent work, hours	238	266
Total hours in academic discipline / credits	288 / 8 з.е	288 / 8 з.е.

### 1. Summary of the discipline:

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. 9. Energy saving in construction

#### 2. Learning Outcomes

– 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;

– to be able to choose adequate space-planning and design solutions for energy-efficient buildings; develop options for organizational and technological schemes for the construction of an object in an energy-efficient format with an assessment of the effectiveness of each option;

– have the skill to master the methodology for assessing the energy efficiency of buildings; technological features of the construction of buildings in an energy-efficient format; methodology for the development of detailed construction schedules and schedules for the provision of construction sites with material and technical resources.

#### 3. Formed competencies

SK-3 Apply methods for assessing the energy efficiency of buildings and structures and use the knowledge gained for management

#### 4. Requirements and forms of intermediate certification.

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 or orally-written.