

CONSTRUCTION AND ANALYSIS OF ALGORITHMS

ANNOTATION TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 6-05-0612-03 Information management systems

Profiling Automated information processing systems

	Form of higher education		
	Full-time (daytime)	Part-time	Part-time reduced
Course	1	1	
Semester	2	2	
Lectures, hours	34	8	
Laboratory classes, hours	16	4	
Offset, semester	2	2	
Class hours for the academic discipline	50	12	
Independent work, hours	58	96	
Total hours per academic discipline / credit units	108/3	108/3	

1. Brief content of the discipline

The basics of constructing and analyzing algorithms, types of algorithm complexity, methods for finding capacitive complexity theoretically and experimentally are studied; analysis of the algorithm through its growth function.

2. Learning outcomes

know: - fundamentals of the theory of construction and analysis of algorithms; - asymptotic estimates of algorithms; - classes of computational complexity of problems.

be able to: - perform algorithm research; - evaluate the nature of the growth of the computational complexity of algorithms.

own: - Algorithm analysis tools.

3. Formed competencies

SC-13 Evaluate and record algorithms in the language of flowcharts, decision diagrams, state graphs, and other models.

4. Requirements and forms of current and intermediate attestation.

Current - protection of laboratory works, intermediate - credit.