CONSTRUCTION AND ANALYSIS OF ALGORITHMS

ANNOTATION

TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 6-05-0612-03 Information management systems

	Form of higher education		
	Full-time (daytime)	**Part-time**	**Part-time reduced**
Course	2,3	3	2
Semester	4,5	5,6	3,4
Lectures, hours	102	20	20
Laboratory classes, hours	68	16	16
Exam, semester	4,5	5,6	3,4
Auditorium hours on academic discipline	170	38	38
Auditorium control work (semester/hours)		5 (2 ч)	3 (2 ч)
Coursework, semester/ credits	5	6	4
Independent work, hours	154	286	286
Total hours per academic discipline / credit units	324/9		

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.
to possess a skill: - Algorithm analysis tools.

3. Formed competencies

Mastering of this academic discipline should ensure the formation of the following competences: Model and optimise managerial decisions, Possess the basics of research, search, analyse and synthesise information, Possess the skills of self-development and improvement in professional activity, Show initiative and adapt to changes in professional activity.

4. Requirements and forms of current and intermediate attestation

Defence of laboratory works - current, exam – intermediate, oral-written.