"ALGORITHM CONSTRUCTION AND ANALYSIS".

(name of the discipline)

OUTLINE

TO THE SYLLABUS OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-53 01 02 Automated systems of information processing

	Form of higher education
	Full-time
Course	**1**
Semester	**2**
Lectures, hours	**34**
Practical (seminar) classes, hours	**-**
Laboratory classes, hours	**16**
Audit work (semester, hours)	**-**
Test, Semester	**2**
Classroom hours of the training discipline	**50**
Independent work, hours	**58**
Total hours in the academic discipline / credit units	**108/3**

1 Summary of the contents of the discipline

Formation of students' theoretical knowledge about the construction and analysis of algorithms.

2. Learning objectives

As a result of the study of the discipline, the student must
know:
- basics of the theory of construction and analysis of algorithms;
- practical applications and methods of the theory of algorithms;
- classes of computational complexity of problems.

be able to:
- use different ways of representing algorithms;
- evaluate the nature of the growth of the computational complexity of algorithms.

know how to:
tools for analyzing algorithms.

3. Competencies to be formed

BPC-12 To evaluate and record algorithms in the language of block diagrams, decision diagrams, state graphs and other activity models.

4.Requirements and forms of current and intermediate attestation.

ZLR, TA, PKU, CD, credit.