The name of the academic discipline:
«Algorithms and data structures»

Code and name of specialty	6-05-0612-01 Software Engineering
Training course	1/2
Semester of training	2/3
Number of class hours:	106
Lectures	58
Seminar classes	-
Practical classes	-
Laboratory classes	48
Form of current assessment (credit/differential credit/exam)	credit/exam
Number of credits	7
Competencies to be formed	Mastering the academic discipline "Algorithms and Data Structures" should ensure the formation of basic professional competence: to use the principles of design and analysis of algorithms and data structures, the skills of substantiating the correctness of algorithms for their practical implementation, as well as the theoretical and experimental assessment of their time complexity.

Summary of the academic discipline:

"Algorithms and Data Structures" is an academic discipline that includes the following sections:

The concept of data structure and algorithms.
Abstract computing machines.
Analysis of algorithms.
Data structures.
Basic search and sorting algorithms.
Algorithms on graphs.
Methods for developing algorithms.