Academic discipline:
"Algorithmization and programming"

Code and name of specialty	1-26 03 01 Information Resource Management
Training course	1/2
Semester of training	1/2/3
Number of class hours:	180
Lectures	80
Seminar classes	-
Practical exercises	-
Laboratory classes	100
Form of intermediate assessment (credit/ differential credit/exam)	exam/credit/exam
Number of credits	8
Competencies to be formed	To develop algorithms and source codes of software applications used in the field of economics and management

Summary of the content of the academic discipline:
Fundamentals of algorithmization. Algorithm and its properties. Varieties of algorithm structures. Methods of describing algorithms. Methods of algorithm development and analysis. Programming systems. Classification of programming languages. Structural programming is the main elements of the language. Simple data types. Operations and their priority. Expressions. The main operators. The main features of the I/O organization. Arrays. Lines. Structures. Pointers. The main features of working with dynamic memory. Search and sorting tasks. Subroutines. The main features of the programming language for working with files. Dynamic data structures Fundamentals of object-oriented programming. The basic principles of object-oriented programming (OOP). Integrated developer environment. Application development stages. The hierarchy of classes. Visual event-driven programming. Development of a windowed application.