

# **DATABASES**

(course title)

## **COURSE SYLLABUS ABSTRACT of higher education institution speciality**

1-53 01 02 Automated information processing and management systems

(speciality code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	2	2, 3	2
Semester	3, 4	4, 5	3
Lectures, hours	68	12	6
Laboratory classes, hours	32	8	4
In-class test (semester, hours)		4, 5 sem. (2 hours each)	3 sem. (2 hours)
Exam, semester	3, 4	4, 5	3
Contact hours	100	24	12
Independent study, hours	116	192	204
Total course duration in hours / credit units	216/6	216/6	216/6

### 1. Course outline

The purpose of the discipline "Databases" is the formation of professional competencies for working with modern technologies for creating and operating databases used in various fields of science, technology and economics.

### 2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- basic concepts of databases, basics of building and functioning of databases;
- SQL language;
- ways to work with relational and non-relational databases;
- principles of database modeling and design;

be able to:

- build an information model of the subject area;
- create a database corresponding to the model;
- organize the input of information into the database and the output of reports;
- formulate queries to the database;

possess:

- the theory and standards of data description and manipulation languages, the theoretical and mathematical foundations of constructing the selected data model;
- database design skills.

### 3. Competencies

CK-7 Design and use relational and non-relational databases

4. Requirements and forms of midcourse evaluation and summative assessment: exam.