

DATA MINING TECHNOLOGIES

COURSE SYLLABUS ABSTRACT

7-06-0311-01-1 «Economy»

(speciality code and name)

Economic development of industrial and transport organizations

(profiling)

Advanced higher education

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1	2
Lectures, hours	18	6
Laboratory classes, hours	36	8
Abstract, semester	1	2
Pass/fail, semester	–	2
Contact hours	54	14
Independent study, hours	54	94
Total course duration in hours / credit units	108 / 3	

1. Course outline

Introduction to data analysis. Features of data preparation for statistical analysis. Statistical methods of data analysis. Data analysis by statistical hypothesis testing methods. Main tasks of data mining: Regression analysis. Main tasks of data mining: Cluster analysis. Main tasks of data mining: Pattern recognition. Application of data mining technologies in the natural sciences, technical and humanitarian areas of information technology development.

2. Course learning outcomes

Upon completion of the course, the student will be expected to

know:

– market characteristics of data mining systems, basic data analysis algorithms (classification, clustering, regression);

be able to:

– apply standard methods and developed technologies to solve probabilistic and statistical problems, process statistical information and obtain statistically valid conclusions

to possess skills:

– of working with the main software technologies and methods of intellectual data processing, the use of modern software packages for data mining on a computer.

3. Competencies

UPC-5 Analyze data to solve economic, managerial, research problems.

4. Requirements and forms of midcourse evaluation and summative assessment

Midcourse evaluation is carried out in the form of midcourse progress control (MPC), which is performed in the form of a defense of laboratory works, tests and abstracts. The form of the midcourse evaluation (ME) is a pass/fail.