

"ANALYTICAL PROGRAMMING SYSTEMS".

(name of the discipline)

OUTLINE

TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 1-40 80 02 "System analysis, management and information processing" (by branches)

Professionalization: Information Control Systems

II level of higher education (master's degree)

	Form of higher education	
	Full-time	Correspondence
Course	1, 2	1, 2
Semester	2, 3	2, 3
Lectures, hours	66	14
Laboratory hours	76	14
Test, Semester	2	2
Exam, semester	3	3
Term paper, semester	3	3
Classroom hours in the educational discipline	142	28
Independent work, semester hours	98	212
Total hours in the discipline / credit units	240/6	240/6

1 Summary of the content of the discipline

Acquisition by undergraduates of theoretical knowledge and practical skills in the theory of machine learning basics, modern methods of reconstructing relationships with empirical data, including discriminant, cluster and regression analysis, mastering the skills of practical problem solving intelligent data analysis.

2 Learning objectives

As a result of the study of the discipline, the student should

know:

- fundamental concepts, modern approaches, methods and problems of machine learning and data mining.

be able to:

- understand and formalize the task of data analysis;
- use modern methods of machine learning for the practical solution of data analysis problems;
- if necessary, dictated by the peculiarities of the task, create new methods of machine learning;
- conduct numerical experiments on model and real data and interpret their results;
- present research results orally and in writing.

master:

- skills in mastering large amounts of information and solving complex theoretical and practical data analysis problems;
- skills of independent work and mastering new disciplines;
- Culture of formulation, analysis and solution of mathematical and applied problems, which require the use of mathematical approaches and methods for their solution;
- The subject language of machine learning and data mining, description skills of problem solving and presentation of results obtained.

3. Competencies to be formed

SK-4 Use advanced programming technologies to solve innovative and professional tasks (by branches).

4 Requirements and forms of current and intermediate attestation.

ZLR, TA, credit.