"ANALYTICAL PROGRAMMING SYSTEMS".
(name of the discipline)
OUTLINE
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION
specialty 7-06-0612-03 system information management

	Form of higher education	
	Full-time	**Correspondence**
Course	**1,2**	**1,2**
Semester	**2,3**	**2,3**
Lectures, hours	**58**	**14**
Laboratory hours	**58**	**14**
Test, Semester	**2**	**2**
Exam, semester	**3**	**3**
Term paper, semester	**3**	**3**
Classroom hours in the educational discipline	**116**	**116**
Independent work, semester hours	**300**	**300**
Total hours in the discipline / credit units	**416/6**	

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.

have the skill:

- 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 .

4 Requirements and forms of current and intermediate attestation.

Current - ZLR, intermediate - exam, credit.