"ANALYTICAL PROGRAMMING SYSTEMS ".
OUTLINE
TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION
specialty 7-06-0612-03 system information management

	form of higher education	
	full-time (full-time)	Correspondence
Course	1, 2	2
Semester	2, 3	3,4
Lectures, hours	50	12
Laboratory classes, hours	50	12
Test, semester	2	3
Exam, semester	3	4
Course work, semester	3	4
Classroom hours per academic discipline	100	24
Independent work, hours	196	272
Total academic hours /credits	296/9	

1. Summary of the academic discipline
The acquisition by undergraduates of theoretical knowledge and practical skills in the field of the fundamentals of machine learning theory, modern methods of dependency recovery based on empirical data, including discriminant, cluster and regression analysis, mastering the skills of practical solving problems of data mining.

2 Learning objectives
As a result of studying the academic discipline, the student must
Knowledge:
– 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 machine learning methods for practical solutions to data analysis problems;
– if necessary, dictated by the specifics of the task, create new machine learning methods.;
– conduct numerical experiments on model and real-world data and interpret their results;
– to present the research results in oral and written form.
have the following skills:
– the skills to master a large amount of information and solve complex theoretical and practical problems of data analysis;
– skills of independent work and mastering new disciplines;
– a culture of setting, analyzing, and solving mathematical and applied problems that require the use of mathematical approaches and methods to solve them;
– the subject language of machine learning and data mining, skills in describing problem solving and presenting the results.

3. Emerging competencies
Use advanced programming technologies to solve innovative and professional tasks.

4 Requirements and forms of current and intermediate attestation.
Defence of laboratory works - current attestation, the exam - intermediate attestation, oral and written.