"Modern Computer Vision Systems"

(name of the course)

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
Course	**1**
Semester	**2**
Lectures, hours	**36**
Laboratory hours	**36**
In-class examination (semester, hours)	
Examination, Semester	**2**
Classroom hours in the educational discipline	**72**
Independent work, hours	**144**
Total hours in the educational discipline / credit units	**216/6**

1.Summary of the content of the discipline

Formation of students' knowledge, skills, abilities, necessary to build modern computer vision systems.

2. Learning objectives

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

know:

- a set of problems of modern computer vision systems;
- principles of hardware and software design of modern computer vision systems;
- tools for receiving and processing two-dimensional and three-dimensional images of various objects;
- basic libraries for working with the image, its processing and recognition algorithms;

be able to:

- use mathematical algorithms in practice, including with the use of modern computing systems;
- methodological knowledge and research skills, providing the solution of problems of research, scientific and pedagogical and educational, organizational and managerial and innovative activity;
- use packets of applied programs and means of computer graphics.

possess:

- methods of constructing systems designed to assign objects to one class;
- ability to find, analyze, implement and use in practice mathematical algorithms, including the use of modern computing systems;
- ways of obtaining, representation, detection, recovery, classification and retrieval of graphic information, its analytical processing.

3. Competencies to be formed

SK-4 Apply methods of constructing systems designed to assign objects to one of the classes.

4. Requirements and forms of current and intermediate attestation.

ZIZ, TA, exam.