

"MULTI-AGENT 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
Course	2
Semester	3
Lectures, hours	34
Laboratory classes, hours	34
Exam, semester	3
Classroom hours in the educational discipline	68
Independent work, hours	130
Total hours of the discipline / credit units	198/6

1. Summary of the contents of the discipline

Studying methods, models, means and technologies of computer processing of information and automated control based on the theory of artificial agents and multi-agent systems, getting basic knowledge in design and programming of multi-agent systems.

2 Learning objectives

As a result of studying the discipline the student should **know**:

- theoretical foundations, state, opportunities, prospects for the development of artificial intelligence technologies;
- advanced methods, models, tools and technologies of computer information processing and automated control based on the theory of artificial agents and multi-agent systems
- basic models and algorithms of artificial intelligence for solving intellectual tasks in various subject areas,
- the main ways of increasing the intellectual level of information systems;
- problems associated with the application of agent-based approaches and technologies.

be able to:

- use the acquired knowledge of the development, adaptation and use of the latest tools of computer science and artificial intelligence based on the theory of agents in professional activities;
- apply new professional knowledge for creating intelligent models and algorithms;
- apply advances in artificial intelligence technologies to implement intelligent components of information systems in various application areas;

possess:

- skills of designing agent-based and multi-agent models in various application domains;
- skills of creating agent-based and multi-agent components of software systems in various application areas.

3. Competencies to be formed

SK-6 Develop distributed and multithreaded applications in information systems.

4. Requirements and forms of current and intermediate attestation.

PBL, TA, exam.