Distributed Application Management and Programming

(name of discipline)

SUMMARY OF THE EDUCATIONAL INSTITUTION'S CURRICULUM

Specialty 6-05-0612-03 "Information Management Systems"

profile "Information systems and technologies in design and production"

	The form of higher education		
	Full-time (full-time)	Correspondence	Correspondence shortened*
Course	4	4	3
Semester	7	8	5
Lectures, hours	32	6	6
Laboratory classes, hours	16	4	4
Auditorium control work (semester, hours)	–	8 (2 ч.)	5 (2 ч.)
Exam	7	8	5
Auditorium hours for the academic discipline	48	12	12
Independent work, hours	60	96	96
Total hours for the academic discipline / credit units	108/3		

1. Brief content of the academic discipline

Purpose of the academic discipline: in-depth training of students in technological basics and practical skills of designing, implementation and maintenance of large software systems of modern computers on the basis of object-oriented programming technology.

2. Learning outcomes

As a result of studying the discipline the learner should

know:

- principles of object-oriented programming and design;
- ways of realisation of relations between classes;
- use of polymorphism, inheritance and encapsulation properties;
- use of abstract classes, interfaces and programming templates;
- principles of representation and structuring of effective systems projects by pro- design patterns;

be able to:

- create programmes on the basis of class technologies using modern object-oriented design systems;
- switch from one object-oriented platform to another;
- use the possibilities of classes and UML language to represent design solutions;

have the skill to:

- methods and technologies of building distributed information processing systems;
- skills of designing and programming components of distributed systems;
- modern means of distributed systems administration.

3. Formative competences

Mastering of this academic discipline should ensure the formation of competence: Create, test and administer remote applications, develop and test service components, create "thin" clients, work with application servers.

4. requirements and forms of current and intermediate certification

Defence of laboratory works - current attestation, oral and written, **the exam** - intermediate attestation, oral and written.