

# **"Programming of network applications"**

(name of the discipline)

## **OUTLINE**

### **TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION**

**Specialty 1-40 05 01 Information systems and technologies (by subject area)**

**The direction of the specialty 1-40 05 01-01 Information systems and technologies (in design and production)**

	<b>Форма получения высшего образования</b>	
	<b>Очная (дневная)</b>	<b>Заочная сокращенная</b>
<b>Course</b>	<b>3</b>	<b>3</b>
<b>semester</b>	<b>5</b>	<b>4</b>
<b>Lectures, hours</b>	<b>34</b>	<b>4</b>
<b>Laboratory hours</b>	<b>34</b>	<b>4</b>
<b>Course Project, Semester</b>	<b>40</b>	<b>40</b>
<b>Exam, Semester</b>	<b>5</b>	<b>4</b>
<b>Classroom hours in the educational discipline</b>	<b>68</b>	<b>8</b>
<b>Independent work, hours</b>	<b>92</b>	<b>152</b>
<b>Total hours of the discipline / credit units</b>	<b>160 / 4,0</b>	

### **1. Summary of the content of the study discipline**

Training of professionals wielding basic knowledge, skills and practical abilities in the field of languages and tools for developing client-server architecture-oriented network applications, programming elements of such architecture.

### **2. Learning outcomes**

As a result of the study of the discipline the student should:

#### **know:**

- basics and features of the programming language used;
- basics of developing simple client-server programs, methods of developing server maintenance programs and methods of organizing client-server interaction;
- sequential, multi-threading and multi-process client-server service;
- methods and tools for developing client-server architecture programs interaction and debugging, order of development of interaction protocols and methods of their use in programs for program development
- technology of client-server interaction, the order of development of the user interface;

#### **be able to:**

- create applications of remote call procedures and methods, applications in client-server architecture with different methods and procedures of server processing of client requests;
- develop applications with different types of application clients and interfaces using modern technologies
- use the most common network communication protocols and other means of data transfer in client-server architectures to develop applications;

#### **possess:**

- network application development tools;
- software development tools of distributed information systems;
- methods of developing applications for distributed data processing and remote call technology;
- languages and techniques for programming server applications and user interfaces.

### **3. competencies to be formed**

AK-1, AK-11, SCL-6, PK-1, PK-2, PK-3, PK-4, PK-6, PK-9.

### **4. Requirements and forms of current and intermediate attestation.**

ZLR, PKU, ZKP, TA, exam.