

**GRAPH THEORY**  
(course title)  
**ANNOTATION**  
**TO THE CURRICULUM OF THE DISCIPLINE**

**Specialty 6-05-0611-01 «Automated information processing systems»**

	The form of higher education	
	Full-time (full-time)	Correspondence
Course	<b>2</b>	<b>3</b>
Semester	4	5
Lectures, hours	34	6
Lab exercises, hours	16	4
Auditorium control work (semester, hours)	-	5, 2
Report, semester	4	5
Classroom hours in the academic discipline	50	12
Individual work, hours	58	96
Total hours in the discipline / credits	108/3	108/3

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

Teaching students the basics of computer networks; gaining practical skills in programming network protocols; mastering the theory and practice of designing computer networks.

### **2. Learning outcomes**

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

**know: the basic concepts of building local and global networks; hardware and software networking; basic protocols, methods of organization, methods of combining computers in the network; principles of developing programs to organize client-server interaction;**

**be able to: analyze the level of effectiveness of network solutions; effectively use operating systems and offer network solutions for developed application tasks; develop interaction programs to work in client-server architecture to organize client-server interaction and distributed data processing; use different protocols in software development;**

**has a skill: basic methods and software tools of network applications development; methods of setting and solving the problem of designing or upgrading a local or corporate computer network.**

### **3. Competencies to be formed**

Mastering this study discipline should ensure the formation of the following competencies: Develop models of computer networks, networking programs, use hardware and software components of computer networks in solving problems in the areas of activity, work with network protocols.

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

Defence of laboratory works - current, oral -written, credit – intermediate, oral -written