<div align="center">

DESCRIPTION OF STUDY MODULE[*]

</div>

Study programme	**Applied Informatics and Programming**		

Study module	**COMPUTER NETWORK TECHNOLOGIES**	**Credits in total**	**3**

Learning outcomes
- Ability to connect a small computer network. - Lists the network types and their differences, IP address and data packet structure. - Ability to find network errors using the console. - Creates a small network in a virtual environment. - Understands how to configure a real network. - Self-study using Netacad environment.
Aims of study module
Aim of the course - to learn how to create a virtual network model, according to the given requirements, divide network into subnets, assigning dynamic or static IP addresses. It is also taught in the network to find the error using the console.
Annotation of a study module
This course provides students with deep basics of networking specialization. Students learn functioning of the network protocols, way in which information is transmitted, what the types of networks are, what IP address is made of, structure of sent packets. Students create their own virtual networks using Packet Tracer, learn how to divide network into subnets.
Topics of the subject
1. Introduction to Networks 2. Networking Types 3. OSI Reference Model 4. TCP/IP Model 5. Ethernet Technologies and Cabling 6. Cisco 3 Layer Model 7. IP Addresses – Composition, Types and Classes 8. Private and Public IP addresses 9. Subnetting 10. Variable Length Subnet Masks (VLSM) 11. Troubleshooting IP Addressing
Procedure for assessment of knowledge and competences
Applicable criterion-ten-point scale, and the cumulative assessment scheme: control works consist of 0.1, laboratory work - 0.1 - 0.2 and exam 0.5 of evaluation score, which is calculated by the weighted average method. Subject absorption final rating is calculated only if all self-employment (individual homework) assignments and control work is handed over and evaluated positive. F = C1*0.1+C2*0.1+L1*0.2+L2*0.1+E*0.5
Main literature
1. W. Odom (2013) Cisco CCENT/CCNA ICND1 100-101. 1758 p. 2. Cisco material in NETACAD system.