EDUCATION PROGRAM

Author's Courses

Hardware of Workstations and Laptops

- Processors
- RAM
- Data Storage Devices
- Peripheral Devices
- Fundamentals of Operating Systems
- Fundamentals of Networks

Fundamentals of Algorithm Theory

Procedural Programming Using C++ Language

- Principles of working with pointers
- Use of structures
- Search and sorting algorithms
- Use of file system

Switching in Local Networks, Basic Course

- Model OSI
- Ethernet
- Fast Ethernet
- Gigabit Ethernet
- 10G/40G/100G Ethernet
- Wi-Fi
- He
- Switching

Switching in Local Networks, Advanced Course

- Vlan
- Trunking
- 802.1q
- VTP
- DTP
- CDP
- STP
- HDLC
- PPP
- FR

Designing, Installation, and Diagnostics of Structured Cable Systems

Routing in IP Networks, Basic Course

- IP
- ARP
- Routing
- Subnetting
- VLSM
- CIDR
- IEMP
- ACL
- NAT
- Tunneling

Routing in IP Networks, Advanced Course

- IPv6
- ICMPv6
- DHEP
- DHCPv6
- DNS
- RIP
- RIPng
- EIGRP
- OSPF
- VPN

Application Protocols and Services of the TCP/IP Stack

- TCP
- UDP
- Telnet
- SSH
- SMTP
- IMAP
- POP3
- FTP
- TFTP
- HTTP
- Proxy
- SNMP
- Net BIOS
- Syslog
- RADIUS

Administration of Windows 10 OS

- Installation, upgrade, migration
- Boot process
- Access management to resources
- Security configuration
- Optimization and maintenance

Administration of Windows Server 2012/2016

- Network services
- RRAS
- Security
- AD
- Group Policy
- Virtualization
- Terminal services

Linux System Administration

- Installation
- Boot process
- File systems
- Devices
- User management
- Access rights management
- Scripting

Linux Network Administration

- Routing
- DHCPd
- Samba
- Bind
- Mail
- Apache
- File services
- Monitoring

Computer Network and System Security

- Basics of cryptography
- Authentication
- Authorization
- System analysis
- IDS/IPS
- Packet filters

Administration of Microsoft SQL Server 2016

- Creation of databases
- SQL
- Backup and recovery
- Security model
- Replication

Fundamentals of virtualization and cloud technologies

- VMWare product line
- Microsoft
- Amazon

Cloud technologies and DevOps tools

- AWS
- Microsoft Azure
- GitHub
- Docker
- Zabbix, etc

Python for system administration

Authorized courses included in the training program

CISCO ACADEMY

- It Essentials. PC Hardware and Software
- Cybersecurity Essentials
- CCNA. Introduction to Networks
- CCNA. Switching, Routing, and Wireless Essentials
- CCNA. Enterprise Networking Security, and Automation Network Security
- NDG Linux Essentials
- PCAP — Programming Essentials in Python

MICROSOFT IMAGINE ACADEMY

- Windows® Operating System Fundamentals
- Windows Server Fundamentals
- Installing and Configuring Windows Ser ver
- Administering Windows Server
- Configuring Advanced Windows Ser ver

The training program includes soft skills training and an English-speaking club for IT professionals.

Upon completion of the training, students will be prepared to take certification exams for the following certification programs:

CISCO: 200-301 CCNA Implementing and Administering Cisco. MICROSOFT: Windows 10: MD-100. COMPTIA: CompTIA A+ 220-1001,220-1002 ConpTIA Network+ N10-007.

Students who successfully complete the training will receive international certificates for completing authorized courses from Cisco Academy and Microsoft Imagine Academy.

Any enterprise that uses modern information technology in their activities needs qualified specialists in this field.

Graduates of the course can work as network and system administrators, engineers in IT departments of large state and commercial companies, banks, educational institutions, and companies specializing in systems integration and analysis.



AFTER COMPLETING THE «NETWORKS AND CYBERSECURITY» SPECIALIZATION, GRADUATES WILL BE ABLE TO:

- Design, install, and certify a structured cable system.
- Design and build a local network of any complexity using modern active equipment.
- Organize a corporate routed network using global IP-based technologies.
- Connect a corporate network to the Internet while ensuring the necessary level of security.
- Develop and implement comprehensive security policies in the network.
- Deploy and maintain necessary network services, ensuring secure and efficient access to network resources.
- Administer modern server operating systems and active network equipment.
- Optimize processes using DevOps tools.
- Manage the functioning of large, highly complex networks.
- Diagnose and fix various network malfunctions and failures.
- Create infrastructure and manage it using cloud technologies.