APPLICATION OF EDUCATIONAL ENVIRONMENTS WHEN LEARNING AT ACCELERATED PROGRAMS
Accelerated Learning

- Shortened training periods - there is very little classroom time allocated for each discipline.
- Trainees are already specialists in their field with practical experience.
- Low intensity of training (2 days a week), which entails a high rate of development of the discipline material.
- The great importance of independent work is generally characteristic of part-time and distance learning.
For successful learning should:

- Students at the beginning of the study of the discipline receive the necessary guidelines and textbooks (mostly in electronic form). For external students, installation lectures are required in advance.
- During the semester, students also receive all supporting materials - presentations, demos, etc.
- The interaction of students and teachers, in addition to the audience, is also carried out by e-mail.
- In the educational process, educational environments are widely used that can significantly automate the learning process.
Educational environment:

- Moodle
- Cisco Networking Academy environment
Groups of disciplines:

- Technologies for designing and administering computer networks.
- Distributed systems development technologies in the client-server architecture.
- Information Security Technologies.
First part of the CCNA course

• Setting up a network operating system.
• Network Protocols and Communications.
• Network access.
• Ethernet.
• Network layer.
• IP addressing.
• Subnetting IP Networks.
• Transport level.
• Application level.
Laboratory workshop

- Basic setup of equipment
- Configuring a network with a router
- Subnets and variable length masks
- Configure IPv6 network
Network diagram for laboratory work 3-4
Second part of the CCNA course

• Basic concepts and switching settings.
• Virtual Local Area Networks (VLANs).
• Routing concept.
• Inter-VLAN Routing.
• Static routing.
• Dynamic routing.
• Access Control Lists (ACL).
• DHCP protocol.
• IPv4 Network Address Translation.
Laboratory workshop

- Vlan separation of networks and port security
- Routing between VLANs
- Static routing
- Dynamic routing with RIP
- Dynamic routing with OSPF
- Firewall configuration using ACL
- Configure DHCP servers and NAT
Network diagram for laboratory work 1
Network diagram for laboratory work 3-5
Network diagram for laboratory work 6-7
Resume

The use of educational environments for learning in accelerated programs allows for such learning in a short time with high quality.