

Course title: Network Devices 2
Course code: 50044
ECTS credits: 5
Requirements: None
Basic information
Level of studies: Undergraduate applied studies
Year of study: 2
Trimester: 6
Goal: Training students to use and configure network devices for administration and design of local computer networks and apply commands of the router operating system for basic network configuration.
Outcome: Upon completion of the course, students should understand computer network performance, be able to set the basic parameters of end and network devices and independently assess, locate and eliminate errors in a configured local computer network.
Contents of the course
Theoretical instruction
1. Network devices
2. Router operating system
3. Basic router configuration
4. Routing
5. Static routing
6. Dynamic routing
7. Troubleshooting in configured computer networks
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Setting TCP / IP computer parameters
2. Using ping and tracert commands
3. Making a straight, cross and roll cable, checking a wire map
4. Local access to a router via a console and using HyperTerminal
5. Basic configuration, router name, passwords, interfaces
6. Configuring a static route and a static default route
7. Configuring a dynamic routing protocol

8. Troubleshooting in a configured local computer network
9. Remote access to a router using Telnet
10. Explanation of ARP tables. Applying ARP commands.
Textbooks and References
1. J. F. Kurose, K. W. Ross, Умрежавање рачунара од врха ка дну са Интернетом у фокусу, превод шестог издања, РАФ Рачунарски факултет, Београд, CET Computer Equipment and Trade, Београд, 2013, оригинално издање: Computer Networking: A Top-Down Approach Featuring the Internet, Pearson Education, Inc., 2013.
2. W. Odom, "CCNA Routing and Switching 200-125 Official Cert Guide Library", Cisco Press, 2016, ISBN-10: 1-58720-581-5
3. Cisco Networking Academy, "Connecting Networks Companion Guide", Cisco Press, 2014, ISBN-10: 1-58713-332-6
4. M. Pavlović, M. Kragović, M. Zajeganović, "Praktikum iz mrežnih uređaja", Visoka ICT škola, prvo dopunjeno izdanje, Beograd 2014
Number of active classes (weekly)
Lectures: 1
Practical classes: 3
Other types of classes: 1
Grading (maximum number of points: 100)
Pre-exam obligations: Points
Activities during lectures: 0
Activities on practical exercises: 70
Seminary work: 0
Colloquium: 0
Final exam: Points
Written exam: 30
Oral exam: 0
Lecturer: Milan Pavlović, PhD
Associate Nikola Kurbalija