Course title: Network Devices 1
Course code: 50043
ECTS credits: 5
Requirements: None
Basic information
Level of studies: Undergraduate applied studies
Year of study: 2
Trimester: 5
Goal: Acquainting students with the basic mechanism of communication in computer networks, network media and their features and limitations, Ethernet protocol, Ethernet technologies and network devices.
Outcome: Students should understand computer network performance and be able to set the basic parameters of end and network devices.
Contents of the course
Theoretical instruction
1. LAN and WAN technologies
2. Network devices
3. Router
4. Router operating system
5. Routing principles
6. Static routes
7. Dynamic Routing protocols
8. RIP (Routing Information protocol)
9. Switching
10. Ethernet technologies
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Setting TCP / IP computer parameters
2.Connecting a PC to a network
3. IPv4 and IPv6 addressing
4. Ping and tracert commands on a computer
5. Router configuration: basic parameters

6. Static route configuration
7. RIPv2 protocol configuration

Textbooks and References

1. D. E. Comer, Internetworking with TCP/IP Volume One, Pearson, 2013.
2. J. Doyle, J. Carroll, Routing TCP/IP, Volume II: CCIE Professional Development, Cisco Press, 2016.
3. J. F. Kurose, K. W. Ross, Умрежавање рачунара од врха ка дну, превод четвртог издања, RAF Računarski fakultet, Beograd i CET Computer Equipment and Trade, 2009, оригинално издање: Computer Networking: A Top-Down approach, by Pearson Education, Inc

Number of active classes (weekly)

Lectures: 3
Practical classes: 2
Other types of classes: 0

Grading (maximum number of points: 100)

Pre-exam obligations: Points
Activities during lectures: 0
Activities on practical exercises: 0
Seminary work: 0
Colloquium: 40
Final exam: Points
Written exam: 60
Oral exam: 0

Lecturer: Milan Pavlović, PhD

Associate: Nikola Kurbalija