Course title: Routing Techniques Course code: 50055

ECTS credits: 6
Requirements: None

Basic information

Level of studies: Master applied studies

Year of study: 1

Trimester: 1

Goal: Training students to configure and maintain network devices and solve problems related to routing protocols.

Outcome: Acquainting students with the routing basics and router performance. Upon completion of the course, students should be able to independently configure a router and solve routing problems in a configured network.

Contents of the course

Theoretical instruction

- 1. WAN technologies and routing
- 2. Network devices
- 3. Routing protocols
- 4. Troubleshooting routing problems
- 5. Network management

Practical instruction (Problem solving sessions/Lab work/Practical training)

- 1. Subnetting (VLSM, CIDR)
- 2. Connecting a network
- 3. Configuring routers
- 4. Configuring switches
- 5. Solving routing problems

Textbooks and References

- 1. James F. Kurose, Keith W. Ross, Умрежавање рачунара од врха ка дну са Интернетом у фокусу, превод трећег издања, РАФ Рачунарски факултет, Београд, CET Computer Equipment and Trade, Београд, 2005, оригинално издање: Computer Networking: A Top-Down Approach Featuring the Internet, Rearson Education, Inc., 2005.
- 2. Douglas E. Comer, Povezivanje mreža TCP/IP: Принципи, протоколи и архитектуре, превод четвртог издања, CET Computer Equipment and Trade, 2001, Београд, оригинално издање: Internetworking with TCP/IP, Vol I: Principles, Protocols, and Architecture, Fourth Edition, Prentice Hall, Inc., 2000.
- 3. Richard Deal, CCNA-Cisco Certified Network Asociate Study Guide, McGraw-Hill, 2008.
 - 4. Henry Benjamin, CCNP Practical Studies: Routing, Cisco Press, 2002.

Number of active classes (weekly)

Lectures: 4

Practical classes: 2

Other types of classes: 0

Grading (maximum number of points: 100)

Pre-exam obligations: Points

Activities during lectures: 5

Activities on practical exercises: 25

Seminary work: 0

Colloquium: 30

Final exam: Points

Written exam: 40

Oral exam: 0

Lecturer: Milan Pavlović, PhD

Associate: Marija Zajeganović, MSc