

Course title: Advanced Routing Techniques
Course code: 50057
ECTS credits: 6
Requirements: None
Basic information
Level of studies: Master applied studies
Year of study: 1
Trimester: 2
Goal: Introducing advanced routing protocols used in larger computer networks as well as on the Internet.
Outcome: Upon completion of the course, students should have theoretical and practical knowledge of advanced routing traffic in computer networks.
Contents of the course
Theoretical instruction
1. Advanced functions of RIPv2 routing protocol
2. Advanced functions of EIGRP routing protocol
3. Advanced functions of OSPF routing protocol
4. OSPF multi-area
5. OSPF stub zone
6. Basics of BGP protocol
7. Basics of audio and video traffic routing via Multicast
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Creating and configuring complex network topologies which use advanced routing protocol functions.
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, Pearson 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 Associate Study Guide, McGraw-Hill, 2008.
4. Henry Benjamin, CCNP Practical Studies: Routing, Cisco Press, 2002.
Number of active classes (weekly)
Lectures: 3
Practical classes: 2
Other types of classes: 1
Grading (maximum number of points: 100)
Pre-exam obligations: Points
Activities during lectures: 0
Activities on practical exercises: 50
Seminary work: 0
Colloquium: 20
Final exam: Points
Written exam: 30
Oral exam: 0
Lecturer: Nenad Krajnović, PhD
Associates: Marija Zajeganović, MSc; Radovan Mitričević