Course title: Windows System Administration

Course code: 61042

ECTS credits: 6

Requirements: None

Basic information

Level of studies: Undergraduate applied studies

Year of study:2

Trimester: 5

Goal: Acquiring knowledge of the basics of computer network administration on the example of Windows Server and training for independent execution of server management tasks.

Using the server operating system and hardware in the process of administering computer networks.

Outcome: Students should be able to independently install and administer the computer network using the Windows Server operating system.

Contents of the course

Theoretical instruction

1. Network operating systems. System administrator. Introduction to Windows Server.

2. Active directory. Domain controllers. Active Directory Federated Services.

3. User accounts. User and group management.

4. Active Directory Planning. System security (public key cryptography, security protocols: Kerberos, SSL HTTPS, IPSec, packet and barrier filtering router).

5. Networking and Communication, DHCP and DNS Protocols,

6. Data Storage Systems, Disks and Volumes, Disk Structure, Backup, NTFS and RaFS File Systems.

7. Checkpoints, Storage Networks (SANs), High Availability, Server Clusters, Network Printer Sharing.

8. Web server management using IIS. Routing with Windows. Using a VPN. Read-Only Domain Controllers.

9. Introduction to Virtualization and Hyper-V.

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

1. Installation and setup of MS Windows Server.

2. Defining server roles in a network environment. Setup and testing of TCP / IP services - DNS, DHCP, WINS.

3. Active directory. MMC console, account creation and group policy configuration and control. Installation and setup of Microsoft ISA Server, Configure protection of computer systems using Microsoft ISA server. Replication. Backup.

Textbooks and References

1. Mark Minasi: Mastering Windowes Server 2012, Sybex, Wiley, 2014

2. Mitch Tulloch: Instaliranje i konfigurisanje Windows Servera 2012, CET Beograd, 2014

3. https://technet.microsoft.com/en-us/library/bb625087.aspx, Microsoftov web sajt sa tehničkom dokumentacijom

Number of active classes (weekly)

Lectures: 4

Practical classes: 1

Other types of classes: 1

Grading (maximum number of points: 100)

Pre-exam obligations: Points

Activities during lectures: 0

Activities on practical exercises: 0

Seminary work:

Colloquium: 70

Final exam: Points

Written exam: 30

Oral exam:

Lecturer

Milorad Paskaš, PhD; Vitomir Radosavljević, PhD

Associate