

Obuda University		Donát Bánki Faculty of Mechanical and Safety Engineering		
Subject name, code: IT Networks, BGRIH1KTNC				Credits: 4
<i>Full-time course 2014/2015 year II . semester</i>				
Faculties:: <i>Mechanical and Safety Engineering</i>				
Subject Leader:	Krisztina Tibenszky-Forika PhD.	Instructor	Krisztina Tibenszky-Forika PhD.	
Study conditions:		Informatics I, Informatics II		
Ours per week:	Performance::	Practice.: 1	Labor practice: 2	Consultation
Semester closing(required)	mid-semester mark			
Syllabus				
Educational target: In this subject the students will recognize the structure of IT Networks, network operations and accessibilities, fundamental requirements and basic concepts of network address management and securing data and authentication.				
Timetable				
Educational week (consultation)	Themes			
1.	History of IT networks, targets, standards. The structure of IT networks. Virtual machines. ISO OSI reference Modell.			
2.	IT, like utility. TCP/IP reference Modell. Basic networking concepts. Characteristics of IPV4, IPV6 protocol.			
3.	Configuring DHCP server, types of services.			
4.	Internet addresses, DNS. Telecommunication networks. Types of access.			
5.	Wireless Networking configuring print services			
6	Networking I/O. Distributed file systems.			
7.	1.classroom test			
8.	Update services (WSUS).			
9.	Securing Network Traffic with IPsec.			
10	Domain matrix, Active Directory.			
11.	Network Access Protection (NAP)			
12.	Conditions of activation and recovery.			
13.	2.classroom test			
14.	Correction of unsuccessful tests.			
Study conditions (test, essay)				
Educational week (consultation)	Examination			
7, 13. week	classroom test			
14	Correction of unsuccessful tests			
Review of semester				
Signature from the instructor can get the student, who participate the 75% of consultations and write the classroom tests successfully. Mid-semester mark can get the student, who perform two tests or correct the unsuccessful test. The mid-semester mark is the average of the test marks.				

Required reading:

S. Gnanasudaram, A.Shrivastava, Information Storage and Management, 2nd Edition, John Wiley & Sons, INC ISBN: 978-1-118-09483-9, 2012, USA.

Weijia Jia, Wanlei Zhou, Distributed Network Systems, Network theory and applications, Vol.15, Springer, U.S.A, ISBN:0-387-23839-5, 2005, pp.15-30

Recommended literature

D.Barrett, G. Kipper, Visions of the Future: Virtualization and Cloud Computing, Virtualization and Forensics, 2010, pp. 211-220.

L. L. Kong, Applied Mechanics and Materials, Study of Cloud Computing and Virtualization Technology, 2014, pp. 539, 407.

J. Savill, Microsoft Virtualization secrets, John Wiley & Sons, INC., ISBN: 978-118-29316-4, 2012, USA.

Budapest, 2015.01.09.

.....
subject leader

.....
director