

<b>Course title: Integrated Services</b>
Course code: 50056
ECTS credits: 6
Requirements: None
<b>Basic information</b>
Level of studies: Master applied studies
Year of study: 1
Trimester: 3
Goal: The student should learn the principles of distributed VoIP systems, based on cluster or cloud solutions. The student should master the knowledge of infrastructure needed to support various VoIP services. The student should adopt the basic principles of unified VoIP services.
Outcome: It is expected that the student is able to independently install and administer a distributed VoIP system based on the clusters or cloud computer systems. The student is able to implement different types of virtualizations in the process of installation of a distributed VoIP system. The student is able to perform configuration of VoIP platforms and unified communication features.
<b>Contents of the course</b>
Theoretical instruction
1. Virtualization: Hyper-V and Vmware
2. Server clusters
3. Hybrid cloud
4. Cisco Unified Communication Manager: Installation, configuration and management
5. Microsoft Lync VoIP cloud solution: Installation, configuration and management
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Cisco Unified Communication Manager: Installation, configuration and management
2. Cisco Unified Communication Manager: Services configuration
3. Microsoft Lync VoIP cloud solution: Management and configuration (Microsoft virtual laboratory)
<b>Textbooks and References</b>

1. J. S. Finke, D. Hartmann, "Implementing Cisco Unified Communications Manager, Part 1 (CIPT1) Foundation Learning Guide: (CCNP Voice CIPT1 642-447), 2nd Edition", Cisco Press 2011.
2. A. Behl, B. Gardiner, J. S. Finke, "Implementing Cisco IP Telephony and Video, Part 1 (CIPTV1) Foundation Learning Guide (CCNP Collaboration Exam 300-070 CIPTV1), 3rd Edition", Cisco Press 2016.
3. M. van den Berg, "Managing Microsoft Hybrid Clouds", PACKT Publishing 2015.
4. K. Hanna, N. Winters, "Mastering Microsoft Lync Server 2013", 1st Edition, John Wiley&Sons 2013.
5.
<b>Number of active classes (weekly)</b>
Lectures: 4
Practical classes: 2
Other types of classes:
<b>Grading (maximum number of points: 100)</b>
<b>Pre-exam obligations: Points</b>
Activities during lectures: 5
Activities on practical exercises: 40
Seminary work: 5
Colloquium: 10
<b>Final exam: Points</b>
Written exam: 40
Oral exam:
<b>Lecturer</b>
Goran Zajić, PhD
<b>Associate</b>