



## Syllabus

### BSc Faculty of Computer Science and Engineering

<b>Subject</b>	<b>Server Infrastructure</b>			
	<b>Type</b>	<b>Semester</b>	<b>ECTS</b>	<b>Code</b>
<b>Course Lecturer</b> <b>Course Assistant</b> <b>Course Tutor</b>	Zgjedhore (Z) Osman Osmani	5	5	40IS364
<b>Aims and Objectives</b>	<p>This course targets Students looking to acquire the skills and knowledge necessary to design, implement, and maintain a Server infrastructure in an enterprise scaled, highly virtualized environment. This course emphasizes on a discussion of Server Technologies concepts, which is closely linked with implementations on different hardware solutions with the Windows OS family. Given the ease-of-use of today's commercial-off-the-shelf operating systems and advancements in server hardware, students need to be actively motivated not to treat Servers and their management and operating systems as black boxes, but to gain in-depth insight in the OS and Server implementation.</p>			
<b>Learning Outcomes</b>	<p>Upon successful completion of the course, the student will:</p> <ul style="list-style-type: none"><li>➤ Gain knowledge on Datacenter Virtualizations</li><li>➤ Plan and deploy a server infrastructure</li><li>➤ Design and implement network infrastructure services</li><li>➤ Design and implement network access services</li><li>➤ Plan identity and authentication solutions</li><li>➤ Distinguish cloud services</li><li>➤ Plan System Migration</li><li>➤ Create DRP Plan</li></ul>			

Course Content	Course Plan		Week	
	The definition of IT infrastructure		1	
	Availability Concepts		2	
	Performance and Security Concepts		3	
	Datacenters		4	
	Networking		5	
	Storage		6	
	Compute		7	
	Operating Systems		8	
	End user devices		9	
	Infrastructure deployment options		10	
	Automation		11	
	Documenting the infrastructure, Maintaining the infrastructure		12	
Teaching/Learning Methods	Teaching/Learning Activity		Weight (%)	
	1. Lectures		40%	
	2. Laboratory		20%	
	3. Case studies		40%	
Assessment Methods	Assessment Activity	Number	Week	Weight (%)
	1. Activity – Questionaries		1 - 12	5%
	3. Final Exam			100%

Course resources	Resources		Number
	1. Class		D132
	2. Laboratory		D132
	3. Moodle		CSE2122
	4. Software		Hyper-V, Image
	5. Projector		1
ECTS Workload	Activity	Weekly Hours	Total workload
	1. Lectures	2	24
	3. Case studies	3	36
	4. Independent Learning	4	48
	5. Exams		6
	6. Extra Lab		18
Literature/References			
Contact	o.osmani@ubt-uni.net		