



**UNIVERSITY “UKSHIN HOTI” PRIZREN**  
**FACULTY OF COMPUTER SCIENCE**

PROGRAM: Information Technology and Telecommunication - Turkish

<b>Curriculum - – SYLLABUS</b>							
<i>Level of studies</i>	Bachelor	<i>Program</i>	TIT-TUR	<i>Academic year</i>	2018/19		
<i>SUBJECT</i>	Cloud Computing						
<i>Year</i>	3	<i>Status Of the subject</i>	Obligatory	<i>Code</i>		<i>ECTS credits</i>	6
<i>Semester</i>	6						
<i>Teaching weeks</i>	15		<i>Hours teaching</i>	45	<i>Lectures</i>	2	<i>Exercises</i>
<i>Teaching Methodology</i>	<ul style="list-style-type: none"> <li>Power point of course subjects.</li> <li>Exercises and homework exercises related to the course subjects.</li> <li>Course repetition, group work, discussion and analysis.</li> </ul>						
<i>Consultation</i>	Students with a grade of 40 or above can attend the interview.						
<i>The teacher</i>	PhD.Cand. Berkant Başa		<i>E-mail:</i>	<a href="mailto:basaberkant@gmail.com">basaberkant@gmail.com</a>			
			<i>Tel.:</i>	<a href="mailto:berkant.basa@uni-prizren.com">berkant.basa@uni-prizren.com</a>			
<i>Assistant</i>	Mr. Sertaç Şalçin		<i>E-mail:</i>	<a href="mailto:sertacsalcini@gmail.com">sertacsalcini@gmail.com</a>			
			<i>Tel.:</i>	044 226 277			

Study goal and table of content	Benefits of student
<p>The aim of the course is to introduce the current applications related to cloud computing. The aim of this course is to focus on cloud computing models, techniques and architectures. Concepts such as SaaS, PaaS, IaaS and IDaaS and service providers for these concepts will be introduced.</p>	<p>Students who successfully complete this course:</p> <ul style="list-style-type: none"> <li>Will be able to master the principles of cloud computing.</li> <li>Develop simple applications using Google App Engine.</li> <li>Have knowledge about virtualization, service oriented architecture and web services.</li> <li>Learn the concepts of distributed storage and security.</li> </ul>

<b>Methodology for the implementation of educational topics:</b>		
Lecture: PowerPoint presentation and problem solving. Discussion on the topics in the form of a question and answer, conducting research on the topics covered problem solving and project preparation.		
<b>Conditions for realization of educational topics:</b>		
This course covers cloud computing basics, cloud architecture, service models, benefits of cloud computing, distributed storage, cloud security, services and software, and commercial cloud services.		
Ways of assessing of the student (in %) :	Evaluation in%	Final grade
		51-60%- 6
HomeWork / Practice lesson	% 10	61-70 7
Midterm	%40	71-80 8
Final exam	%50	81-90 9
<b>Total</b>	<b>100.00 %</b>	91-100 10

<b>Obligations of student:</b>			
<b>Lectures</b>		<b>Exercises</b>	
The student is obliged to follow the courses and practice course. They have to come prepared for the lesson based on the resources determined by the professor. During the course, students must actively contribute to improve the quality of the course. The rules and ethical principles required by the university and higher education should be taken into consideration.		Students, for the practical course, by the professor on the topics covered in the course of the course to practice exercises and to prepare homework within the subject.	
<b>Activities</b>		<b>Hour/ weeks</b>	<b>Days/Weeks</b>
Lectures		2	15 weeks
Laboratory exercises		2	15 weeks
Contacts with teachers / consultations		0,5	15 weeks
Practical work		0,5	15 weeks
Projects, presentations, etc.		1	15 weeks
Own study time		1	15 weeks
Preparation for final exam		1	15 weeks
Time spent in the assessment (tests, final exam, etc.)		2	15 weeks
<b>Notice: 1 ECTS credits= 25 hour commitment, e.g. if the subject has 6 ECTS credits student must have 150 hours during the semester commitment.</b>			<b>Total load: 150</b>
Week	Lectures	Hour	Exercises
	Topic		Topic
1-2	<ul style="list-style-type: none"> <li>Introduction to Cloud Computing.</li> <li>Cloud Computing advantages and disadvantages.</li> </ul>	4	<ul style="list-style-type: none"> <li>Introduction to Cloud Computing.</li> <li>Cloud Computing advantages and disadvantages.</li> </ul>
3	Cloud Computing Architectural Structure. Gossip Protocol. Grid Structure.	2	Cloud Computing Architectural Structure. Gossip Protocol. Grid Structure.
4-5	<ul style="list-style-type: none"> <li>Cloud Computing Use scenarios.</li> <li>Cloud Computing Planning.</li> <li>Cloud Technologies (Web Services, AJAX, Mashups).</li> </ul>	4	Cloud Computing Use scenarios. Cloud Computing Planning. Cloud Technologies (Web Services, AJAX, Mashups).
6-7	<ul style="list-style-type: none"> <li>Cloud Computing Service Models.</li> <li>Types of Cloud Computing Solutions.</li> <li>Cloud Development: Data storage in the cloud.</li> </ul>	4	Cloud Computing Service Models. Types of Cloud Computing Solutions. Cloud Development: Data storage in the cloud.
8	Midterm	2	Midterm
9-10	<ul style="list-style-type: none"> <li>Cloud Development: MapReduce.</li> <li>Cloud Development: Dev 2.0 platforms.</li> </ul>	4	<ul style="list-style-type: none"> <li>Cloud Development: MapReduce.</li> <li>Cloud Development: Dev 2.0 platforms.</li> </ul>
11-12	<ul style="list-style-type: none"> <li>Software Architecture.</li> <li>Private Commercial Company Software.</li> <li>Workflow and Business Processes.</li> </ul>	4	Software Architecture. Private Commercial Company Software. Workflow and Business Processes.
13-14	<ul style="list-style-type: none"> <li>Commercial Company Analysis and Research.</li> <li>Cloud Computing Economics.</li> </ul>	4	<ul style="list-style-type: none"> <li>Commercial Company Analysis and Research.</li> <li>Cloud Computing Economics.</li> </ul>
15	Final Exam	2	Final Exam

**LITERATURE:**

1. Bulut Bilişim Ders Notları-“Numan ÇELEBİ-2014”, Sakarya Üniversitesi bilgisayar Mühendisliği Bölümü.
- 2.<https://www.researchgate.net/publication/307545682> Bulut Bilisim Teknolojisi ve Bulut CBS Uygulamalari
3. Bulut Bilişim ve Eğitim Alanında Örnek Bir Uygulama, Onur Seveli, Yüksek Lisans Tezi, Bilgisayar Mühendisliği Anabilim Dalı, Isparta – 2011.
4. Cloud Computing and Virtualization, Tarkan Eyerci, Cybersoft.
5. Bulut Bilişim Güvenliği 85, Evrim Furuncu, Gebze Yüksek Teknolojisi Enstitüsü

**NOTICE:**

- ✓ In general, the course will be run with Power Point and other resources.
- ✓ In addition, the Professor will provide additional resources other than the main sources (scientific studies, reports, national and international published articles).

**Notice for the student:**

- ✓ It is necessary to enter the course on time and prepared.
- ✓ other than this, students cannot enter the course.
- ✓ 80% attendance is required during the semester.
- ✓ In the course, discussion, ask questions, feedback, subject and presentation, taking an active role in the applications.
- ✓ Voice recorder, telephone, etc. The use of such devices is prohibited.