Course Syllabus

Code - Course Title	**VBA414 - Cloud Computing**
Course Type	VIII. SEMESTER
Laboratory + Practice	2+0
ECTS	**4.0**
Language of Instruction	İngilizce
Course Type	Area Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ ÖNDER DORAK

Mode of Delivery	Face-to-face

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Cloud Infrastructure: Basic service models (IaaS, PaaS, SaaS)	
Week - 2		Hardware virtualization mechanics	
Week - 3		Configuring scalable virtual cloud networking	
Week - 4		Secure virtual cloud networking protocols	
Week - 5		Provider Platforms: AWS, Azure, GCP overview	
Week - 6		Utilizing major industry cloud service environments	
Week - 7		Securely managing programmatic resource provisioning	
Week - 8		Monitoring cloud consumption	
Week - 9		Optimizing cloud billing costs	
Week - 10		Cloud Architecture: High geographic availability	
Week - 11		Designing for strict fault tolerance	
Week - 12		Implementing responsive auto-scaling	
Week - 13		Intelligent load balancing configurations	
Week - 14		Deploying serverless computing architectures	

Learning Outcomes

#	Learning Outcome
1	Differentiate IaaS, PaaS, and SaaS foundational service mechanics
2	Manage programmatic resource provisioning in AWS/Azure/GCP

Learning Outcomes

#	Learning Outcome
3	Design fault-tolerant networking auto-scaling architectures globally
4	Deploy efficient serverless paradigms optimizing strict billing costs

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.