Course Syllabus

Code - Course Title	**VBA203 - Database Management Systems**
Course Type	III. SEMESTER
Laboratory + Practice	3+1
ECTS	**6.0**
Language of Instruction	İngilizce
Course Type	Required 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		Relational database vesign: Entity-relationship (ER) modeling	
Week - 2		Relational algebra	
Week - 3		Achieving normal forms (1NF, 2NF, 3NF)	
Week - 4		SQL Query: Complex SELECT statements	
Week - 5		Advanced joins	
Week - 6		Subqueries	
Week - 7		Grouping and aggregation functions	
Week - 8		Advanced database concepts: Indexing strategies	
Week - 9		Transaction management	
Week - 10		Database security protocols	
Week - 11		Stored procedures	
Week - 12		Modern data storage: Introduction to NoSQL databases	
Week - 13		Document stores and key-value databases	
Week - 14		Comparing relational and non-relational architectures	

Learning Outcomes

#	Learning Outcome
1	Design normalized entity-relationship (ER) models.
2	Execute complex SQL SELECT queries and joins

Learning Outcomes

#	Learning Outcome
3	Implement indexing strategies for performance
4	Compare relational and non-relational NoSQL databases

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.