Course Syllabus

Code - Course Title	**BVA102 - Data Mining**
Course Type	II. SEMESTER
Laboratory + Practice	3+2
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	ÖĞR. GÖR. DR. BÜLENT BATMAZ

Mode of Delivery	Face to face
Prerequisites	Basic Mathematical Knowledge
Courses Recomended	Basic Mathematical Knowledge
Recommended Resources	Faculty Recommendation
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Overview of data mining	
Week - 2		Data mining process	
Week - 3		Data cleaning techniques	
Week - 4		Handling missing values, outlier detection and treatment	
Week - 5		Data transformation methods	
Week - 6		Data visualization techniques	
Week - 7		Correlation analysis, data distribution analysis	
Week - 8		Introduction to classification	
Week - 9		Decision trees, logistic regression, Naive Bayes classifier	
Week - 10		Model evaluation techniques	
Week - 11		Introduction to clustering, K-means clustering, hierarchical clustering, evaluation of clustering results	
Week - 12		Market basket analysis, frequent itemsets, association rule generation, rule evaluation and pruning	
Week - 13		Feature selection techniques	
Week - 14		Principal Component Analysis (PCA)	

Learning Outcomes

#	Learning Outcome
1	Understanding of data mining concepts
2	Proficiency in data preprocessing
3	Exploratory data analysis skills
4	Knowledge of data mining algorithms

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.