

COURSE IDENTIFICATION FORM

Course Code and Name: IM5074 DATA MINING

Department of : CIVIL ENGINEERING / MASTER PROGRAMME

Semester	Theoretic Hour	Practice Hour	Total Hour	Credits	ECTS	Education Language	Type: Compulsory Elective
Autumn/Spring	3	0	3	3	5	Turkish	Optional

Prerequisite (s)

Instructor

Mail :
Web :

Course Assistant

Mail :
Web :

Groups / Classes

Course Aim

To introduce our students to various data mining techniques and to provide information about their applications to real-life problems.

Course Goals

- Understanding Data Mining Fundamentals:
- Data Preprocessing:
- Exploring Data Mining Algorithms:
- Pattern Recognition and Prediction:
- Evaluation and Validation:
- Big Data and Scalability:
- Practical Applications:
- Ethical and Privacy Considerations:

Course Learning Outcomes and Proficiencies

- Knows the basic concepts of data mining.
- Gains the ability to pre-process data.
- Learns and applies data mining methods.

Course Basic and Auxiliary Contexts	- Veri Madenciliği Yöntemleri, Yalçın Özkan, Papatya Yayıncılık, 20089. - Kavram ve algoritmalarıyla temel veri madenciliği, Gökhan Silahtaroglu, Papatya Yayıncılık, 2008. - Veri Madenciliği Teknikleri ve Uygulamaları, Filiz Ersöz, Seçkin Yayıncılık, 2019.
Methods of Give a Lecture	Face to Face

Assessment Criteria		If Available, to Sign (x)	General Average Percentage (%) Rate
	Midterm Exam	X	50
	1. Quiz		
	2. Quiz		
	3. Quiz		
	4. Quiz		
	Oral Examination		
	Practice Examination (Laboratory, Project etc.)		
	Final Exam	X	50
Semester Course Plan			
Week	Subjects		
1	Introduction to Data Mining		
2	Data Mining Application Areas and Examples		
3	Data Mining Process		
4	Data Preprocessing		
5	Data Preprocessing		
6	Data Mining Methods		
7	Classification		
8	Classification, Decision Trees		
9	Classification, Decision Trees		
10	Application Examples		
11	Clustering		
12	Clustering		

13	Application Examples
14	Association Analysis