

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Industrial Engineering (English)

Course Information

DECISION MODELS					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
INE306	Spring	3	0	3	4

Prerequisites and co-requisites	None
Language of instruction	English
Type	Elective
Level of Course	Bachelor's
Lecturer	Prof. Dr. Yusuf ZEREN
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise (internship)	None
Objectives of the Course	To teach fundamental concepts in decision making, modeling of decision making problems and solutions to these problems. To show how these methods can be applied to some problems.
Contents of the Course	Fundamental concepts in decision making; decision making models; application of decision making rules; evaluation of decisions; AHP; ANP; ELECTRE; DAE

Learning Outcomes of Course

#	Learning Outcomes
1	Student knows basic terminology in decision theory.
2	Student is able to model and classify of decision making problems.
3	Student gains knowledge on multi-stage decision making models.
4	

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Basic Concepts in Decision Making	Lecturing
2	Basic Concepts in Decision Making	Lecturing
3	Basic Concepts in Decision Making	Lecturing
4	Decision making under uncertainty	Lecturing
5	Multistage decision making models	Lecturing
6	Bayesian Method	Lecturing
7	Midterm	Exam
8	Decision trees	Lecturing
9	AHP	Lecturing
10	ANP	Lecturing
11	DEA	Lecturing
12	Applied Problems I	Lecturing

13	Applied Problems I	Lecturing
14	TOPSIS, ELECTRE, PROMETHEE	Lecturing
15	TOPSIS, ELECTRE, PROMETHEE	Lecturing
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	French, S, "Decision Theory:An Introduction to the Mathematics of Rationality", John Wiley & Sons, NewYork:		
2	1992 Evren R., Ülengin F., "Yönetimde Çok Amaçlı Karar Verme", İTÜ Yayınları, İstanbul: 1992		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Student knows basic terminology in decision theory.	4	1,2
2	Student is able to model and classify of decision making problems.	4	1,2
3	Student gains knowledge on multi-stage decision making models.	4	1,2
4			

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	3	42
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	1	6	6
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	0	0	0
16	Final Exam	0	0	0
				90
