

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Industrial Engineering (English)

Course Information

MANAGEMENT SUPPORT SYSTEMS					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
INE413	Fall	3	0	3	4

Prerequisites and co-requisites	None
Language of instruction	English
Type	Elective
Level of Course	Bachelor's
Lecturer	
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise (internship)	None
Objectives of the Course	The aim of this course is to teach the basic information about management support systems and skills that may be necessary to the students when they take part in product planning, industrial design and identifying customer needs.
Contents of the Course	This course examines the principles, categories, development and use of a specific set of information systems for supporting management decisions at all levels in an organization for faster and better decisions. It involves both theoretical and practical aspects of management support systems. The course starts with a discussion of the decision making styles and decisional needs of managers. Then it relates distinct management support systems (MSS) to those styles and needs. Among the systems studied are data-, model-, knowledge- and document-driven decision support systems (DSS): executive support systems (ESS): group decision support systems (GDSS): and Web-based DSS. In addition, the course investigates the principles and business uses of artificial intelligence (AI) applications: expert systems, fuzzy logic, pattern recognition, genetic algorithms, artificial neural networks, data-, text- and Web-mining, and intelligent software agents. Finally, a discussion of the justification and development of MSS followed by a look into their future and business intelligence trends closes the course.

Learning Outcomes of Course

#	Learning Outcomes
1	Student will get ability to use decision support systems
2	Student will get ability to investigate data structure
3	Student will gain the ability of how to implement real time applications
4	

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Decision Support Systems	Lecturing
2	Decision Making, Systems, Modeling	Lecturing
3	Decision Support System (DSS) Concepts, Methodologies, and Technologies	Lecturing
4	Modeling and Analysis	Lecturing
5	Data Preparation and Data Exploration	Lecturing
6	Data Warehouses and Data Marts	Lecturing

7	Midterm Exam	Exam
8	Artificial Neural Networks (ANN)	Lecturing
9	Data Mining	Lecturing
10	Text and Web Mining	Lecturing
11	Business Performance Management (BPM)	Lecturing
12	Artificial Intelligence (AI) and Expert Systems (ES)	Lecturing
13	Advanced Intelligent Systems	Lecturing
14	Collaborative Computer-Supported	Lecturing
15	Technologies and Group Support Systems (GSS)	Lecturing
16	Final Exam	Exam

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Marcomini, Antonio, Suter II, Glenn Walter, Critto, Andrea (Eds.), Decision Support Systems for Risk-Based Management of Contaminated Sites, 1st Edition, 2008		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Seminar	Seminar
2	60%	Term Paper	Term Paper

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Student will get ability to use decision support systems	9	1,2
2	Student will get ability to investigate data structure	2,9	1,2
3	Student will gain the ability of how to implement real time applications	4,9	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	2	28
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	1	3	3
8	Midterm Exam	1	3	3
9	Quiz	0	0	0
10	Homework	1	5	5
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	1	6	6
16	Final Exam	1	3	3
				90