



ESOGÜ Mathematics and Computer Sciences COURSE INFORMATION FORM

SEMESTER	Fall
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COURSE CODE	821617008	COURSE NAME	Artificial Intelligence
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SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
7	3	0	0	3	5	COMPULSORY () ELECTIVE (x)	Turkish

COURSE CATAGORY

Mathematics	Computer		Social Science
	X		

ASSESSMENT CRITERIA

	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term	1	50
	2nd Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (.....)		
FINAL EXAM		1	50
PREREQUIEITE(S)	None.		
COURSE DESCRIPTION	Presentation of artificial intelligence as a coherent body of ideas and methods to acquaint the student with the classic programs in the field and their underlying theory.		
COURSE OBJECTIVES	<ul style="list-style-type: none"> Introducing students to the basic concepts and techniques of Artificial Intelligence. Learning AI by doing it, i.e. developing skills of using AI algorithms for solving practical problems To gain experience of doing independent study and research. 		
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	Preparing students for more advanced works in Artificial Intelligence.		
COURSE OUTCOMES	Students will explore this through problem-solving paradigms, logic and theorem proving, language and image understanding, search and control methods, and learning.		
TEXTBOOK	Stuart Russell, Peter Norvig, Artificial Intelligence: A Modern Approach, Second Edition, Prentice Hall. 2003		
OTHER REFERENCES	Ivan Bratko, Prolog Programming for Artificial Intelligence, 3/E, Addison-Wesley, 2001		
TOOLS AND EQUIPMENTS REQUIRED	None.		

COURSE SYLLABUS

WEEK	TOPICS
1	Introduction to AI Course Organization /Introduction to Search
2	Problem formulation and search
3	Heuristic search
4	Production system
5	Midterm Exam
6	Semantic network and frame
7	Propositional logic
8	Fuzy logic
9	Othor methods for reasoning
10	Applications
11	An introduction to pattern recognition
12	Multilayer naturel network
13	Self-organizing naturel network
14	Self-organizing naturel network
15,16	Final Exam

NO	PROGRAM OUTCOMES	3	2	1
1	The ability to apply knowledges of Mathematics and Computer Sciences,		x	
2	To have sufficient theoretical and practical knowledge of Mathematics at international level,	x		
3	The ability of describing, modelling and solving of mathematical problems at Mathematics and related subjects,		x	
4	The skill to solve and design a problem process in accordance with a defined target,		x	
5	Skills to analyze data, interpret and apply to other datum and using these data on computer,	x		
6	The skill to use the modern techniques and computational tools needed for mathematical applications,	x		
7	The skill to make team work within the discipline and interdisciplinary,	x		
8	The ability to improve oneself by following the developments on other modern, scientific and technological subjects as well as Mathematics and Computer Sciences,		x	
9	The skill to communicate orally and in written way, in a clear and concise manner by having individual work skills and ability to independently decide and analytical thinking,	x		
10	The skill to have professional and ethical responsibility,		x	
11	The skill to have consciousness for quality issues and scientific research,		x	
12	The skill to be sensitive to environmental issues related with problems and development of living area and consistent in the social relations,		x	
13	Ability to solve problems in the working life faced to find an appropriate algoritms via mathematical modeling and to write computer programs,		x	
14	The skill to developed design of software systems at different complex levels,		x	
15	The credence of necessity of life-long learning and ability to apply the formation long-life learning.	x		
1:None. 2:Partially contribution. 3: Completely contribution.				

Instructor(s): Dr.Özer ÇELİK

Signature:

Date: