



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Stochastic Processes							
Course Code		MIS524		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	7	Workload	181 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Teaching Stochastic models and solution methods							
Course Content		Markov chain, Stochastic models, Queuing Models and solution techniques of the models							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Ahmet Hamdi Kayran, Mehmet Nadir Yücel
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to Stochastic models
2	Theoretical	Markov Chain
3	Theoretical	Markov Chain
4	Theoretical	Markov Chain
5	Theoretical	Stochastic Inventory Models
6	Theoretical	Stochastic Inventory Models
7	Theoretical	Stochastic Inventory Models
8	Intermediate Exam	Midterm
9	Theoretical	Queuing Models
10	Theoretical	Queuing Models
11	Theoretical	Queuing Models
12	Theoretical	Kuyruk Modelleri
13	Theoretical	Stochastic Dynamic Programming
14	Theoretical	Stochastic Dynamic Programming
15	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	16	3	3	96
Individual Work	16	0	3	48
Quiz	1	5	10	15
Midterm Examination	1	5	10	15
Final Examination	1	2	5	7
Total Workload (Hours)				181
[Total Workload (Hours) / 25*] = ECTS				7

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Solution techniques of stochastic models
2	Experience on modeling dynamic process with using stochastic models
3	Basic structure in the stochastic models



4	Learns tail models
5	Understands the basic concepts of probability and random variables.

Programme Outcomes (Management Information Systems Master)

1	Be aware of the different types of information technologies and systems using in business, have enough knowledge to design a suitable system
2	Analyse the needs for an information systems and have control over the processes at the analysis, design and implementation stages of the database that belongs to the system
3	Convey information about current trends and their own studies both verbally and visually ways.
4	Be able to follow current developments in modern business techniques and technologies, especially information technologies
5	Understand the interaction between his department and other relational departments, if necessary make a team, take responsibility and do the works with team.
6	Know the information technologies and systems using in different types of business, if necessary take the system responsibility.
7	Be aware of the social transformation especially in their own field and social, legal and moral responsibilities belongs to other work field.
8	Develop their knowledge to the level of expertise which they learn them in license level.
9	Carry out a work which requires an expertness in their field.
10	Construct and perform an academic work.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	4	4	5	4	4
P2		5			
P3	4	5		4	5
P4	4	5	5	4	5
P5	4	5	5	5	5
P6	4		5	5	5
P7	5	5	5	5	4
P8	5	5	5	5	
P9	5	5	5	5	4
P10	5	5	5	5	4

