AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Computer Aided Decision Models						
Course Code		FEK528		Couse Level		Second Cycle (Master's Degree)		
ECTS Credit	5	Workload	125 *(Hours)*	Theory	3	Practice	0	Laboratory	0

Objectives of the Course	The objective of this course is to introduce students to data collection and analysis from which sound conclusions can be drawn. This includes techniques of estimation, hypothesis testing, and regression and industrial engineering applications.
Course Content	Point and interval estimation of systems parameters, statistical decision making about differences in system parameters, analysis and modeling of relationships between variables, and applications in industrial engineering.
Work Placement	N/A
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion
Name of Lecturer(s)	

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Quantitative Analysis for Management, B. Render, R.M. Stair, Jr., M.E. Hanna, Pearson, 11th edition 2012.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction
2	Theoretical	Data Description, Arranging/ Displaying Data
3	Theoretical	Lineer programming: Graphical Method
4	Theoretical	Lineer programming: Graphical Method
5	Theoretical	LP problem solving
6	Theoretical	LP problem solving
7	Theoretical	Sensitivity Analysis
8	Intermediate Exam	Mid-term
9	Theoretical	Transportation Models
10	Theoretical	Transportation Models
11	Theoretical	İnteger, Goal, Nonlinear Programming
12	Theoretical	Project Management
13	Theoretical	Project Management
14	Practice	Decision Analysis
15	Practice	Decision Analysis
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Individual Work	7	2	2	28
Midterm Examination	1	10	1	11
Final Examination	1	15	1	16
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Arrange and display data

2	Estimate parameters of distributions
3	Assess risks in decisions, concerning long term performance, based on sample data
4	Select proper statistical techniques for statistical decision making based on the type of data available
5	Use statistical software to conduct analyses and interpret output

Programme Outcomes *(Econometrics Master)*

1	Understanding the concept of econometric
2	Ability to estimate econometric models
3	Test to the estimated reliability of the econometric model
4	Learning time series analysis
5	Recognition of financial assets and analysis that estimates the decisions of economic units
6	Be able to use econometric methods developed specifically for analysis of financial data
7	To be able to use computer programs needed in the field financial economics as well as information and communication technologies in advanced levels
8	Provision of the information that will be base for the econometric applications on money theories, theories of international trade and finance
9	Considering a scientific research,to be able to make a profound literature research, analysis,estimations and reporting findings in a scientific 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	2	4	4	3	4
P2	3	3	3	4	3
P3	4	4	4	3	4
P4	3	3	3	4	3
P5	4	4	2	2	4
P6	3	3	5	3	3
P7	4	4	4	4	4
P8	3	3	3	3	2
P9	4	4	4	4	3