



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Forecasting Methods							
Course Code		FEK527		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Classification of forecasting methods used in business and economics sciences, features of forecasting methods, forecasting method selection, model selection, forecasting model, testing the validity of the model and checking model							
Course Content		To identify the appropriate forecasting method,obtaining predictions from sampling method, be able to test the validity of the obtained predictions,be comparable in prediction methods.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Project Based Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Statistical Methods for Forecasting, B. Abraham ve J. Ledorter
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Week	Weekly Detailed Course Contents	
1	Theoretical	To identify the appropriate forecasting method.
2	Theoretical	Exponential smoothing method in non-seasonal data: fixed averaged model, single-stage exponential smooth
3	Theoretical	The two-stage and three-stage exponential smoothing method
4	Theoretical	Exponential smoothing method in seasonal data
5	Theoretical	Winter's method and seasonal adjustment
6	Theoretical	Stochastic time series models: Autoregressive model
7	Theoretical	Moving Average Model
8	Intermediate Exam	Mid-term
9	Theoretical	Autoregressive moving average model
10	Theoretical	Stationarity, transformations and seasonal autoregressive moving average model
11	Theoretical	Least squares estimation, maximum likelihood estimation, nonlinear estimation
12	Theoretical	Diagnosis and control of the model, multiplicative seasonal models
13	Theoretical	The relationships between the general exponential smoothing and ARIMA time series models
14	Practice	Applications
15	Practice	Applications
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	To identify the appropriate forecasting method.
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2	To determine properties of the resulting predictions
3	Obtaining predictions from sampling method
4	Be able to test the validity of the obtained predictions
5	Be comparable in prediction methods.

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	4	4	3	2	5
P2	3	3	4	3	2
P3	4	2	2	4	3
P4	3	3	3	3	4
P5	2	2	2	2	2
P6	2	3	3	5	1
P7	3	4	4	3	3
P8	5	3	2	4	4
P9	3	4	3	2	2

