

Course Title	Time Series Modelling							
Course Code	EBC2086							
ECTS Credits	6,5							
Assessment	Whole/Half Grades							
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
	1	4-9-2023	20-10-2023		X		X	
Level	Intermediate							
Coordinator	Alain Hecq For more information:a.hecq@maastrichtuniversity.nl							
Language of instruction	English							
Goals	Enable economic students to perform an empirical analysis of time series using the correct tools. Introduction to quantitative methods and econometrics.							
Description	The objective of this course is to give students in the Bachelors program of Economics an introduction to modelling univariate and multivariate time series in economics. The topics covered will include modelling non-stationary time series, Granger causality, co-integration, ARIMA, seasonality, ARCH, Unit roots.							
Literature	Diebold, F. (2017), Econometrics (available online). Diebold, F. (2017), Forecasting (available online).							
Prerequisites	The Quantitative Methods 3 course for EC, or one of the courses Empirical Econometrics for Business, Empirical Econometrics or Forecasting for international business. Assuming a basic understanding of multiple regression analysis (such as with an introductory course on econometric/quantitative methods), this accessible introduction to time series analysis shows how to develop models capable of forecasting, interpreting and testing hypothesis concerning economic data using well established as well as modern techniques. Based on real-world data and with the help of interactive software such as Eviews we will study and apply key concepts such as ARIMA, unit roots, causality, cointegration, deterministic and stochastic, trends, volatility, outliers, structural breaks, seasonality, vector autoregressive models. an advanced level of English.							
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork							
Assessment methods	Final Paper / Attendance / Participation / Oral Exam / Presentation							
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM							
This course belongs to the following programme / specialisation	Bachelor Economics and Business Economics - Economics				Year 3 Quantitative Economics Elective(s)			
	Bachelor Economics and Business Economics - Emerging Markets				Year 3 Elective Course(s)			
	Bachelor Economics and Business Economics - Economics and Management of Information				Year 2+3 Quantitative Economics Elective(s)			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj Accounting			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj Finance			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj Inf Mgmt			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj Marketing			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj Org			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj SCM			
	Bachelor Economics and Business Economics - International Business Economics				Year 3 QE Elec(s) - Maj Strategy			
	Bachelor International Business - Emerging Markets				Year 3 Elective Course(s)			
	Bachelor International Business				Year 3 QE Elec(s) - Maj Accounting			
	Bachelor International Business				Year 3 QE Elec(s) - Maj Finance			
	Bachelor International Business				Year 3 QE Elec(s) - Maj Inf Mgmt			
	Bachelor International Business				Year 3 QE Elec(s) - Maj Marketing			
	Bachelor International Business				Year 3 QE Elec(s) - Maj Org			
	Bachelor International Business				Year 3 QE Elec(s) - Maj SCM			
	Bachelor International Business				Year 3 QE Elec(s) - Maj Strategy			
	SBE Exchange Bachelor				Bachelor Exchange Courses			
	SBE Exchange Master				Bachelor Exchange Courses			
SBE Non Degree Courses				Bachelor Courses				