

# Course Descriptions Exchange 2014-2015

Course Title Time Series Modelling

Course Code EBC2086

ECTS Credits 6,5

Assessment None

Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	1-9-2014	24-10-2014			X		X	

Level Intermediate

Coordinator Alain Hecq For more information: [a.hecq@maastrichtuniversity.nl](mailto: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 (2006), Elements of Forecasting, Thomson + articles.

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 / Participation / Oral Exam

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 Specialisation Economics	QE Electives
Bachelor Economics and Business Economics Specialisation Economics and Management of Information	QE Electives
Bachelor Economics and Business Economics Specialisation International Business Economics	QE Electives
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses
SBE Non Degree Courses	Bachelor Courses