

# Course Descriptions Bachelor 2020-2021

Course Title Time Series Modelling  
 Course Code EBC2086  
 ECTS Credits 6,5  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	31-8-2020	16-10-2020		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 PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.  
 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