

Course Descriptions NonDegree 2020-2021

Course Title	Time Series Modelling																																										
Course Code	EBC2086																																										
ECTS Credits	6,5																																										
Assessment	Whole/Half Grades																																										
Period	<table border="1"> <thead> <tr> <th>Period</th> <th>Start</th> <th>End</th> <th>Mon</th> <th>Tue</th> <th>Wed</th> <th>Thu</th> <th>Fri</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>31-8-2020</td> <td>16-10-2020</td> <td></td> <td>X</td> <td></td> <td>X</td> <td></td> </tr> </tbody> </table>	Period	Start	End	Mon	Tue	Wed	Thu	Fri	1	31-8-2020	16-10-2020		X		X																											
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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	<p>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.</p> <p>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.</p>																																										
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	<table border="1"> <tbody> <tr> <td>Bachelor Economics and Business Economics - Economics</td> <td>Year 3 Quantitative Economics Elective(s)</td> </tr> <tr> <td>Bachelor Economics and Business Economics - Emerging Markets</td> <td>Year 3 Elective Course(s)</td> </tr> <tr> <td>Bachelor Economics and Business Economics - Economics and Management of Information</td> <td>Year 2+3 Quantitative Economics Elective(s)</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj Accounting</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj Finance</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj Inf Mgmt</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj Marketing</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj Org</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj SCM</td> </tr> <tr> <td>Bachelor Economics and Business Economics - International Business Economics</td> <td>Year 3 QE Elec(s) - Maj Strategy</td> </tr> <tr> <td>Bachelor International Business - Emerging Markets</td> <td>Year 3 Elective Course(s)</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj Accounting</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj Finance</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj Inf Mgmt</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj Marketing</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj Org</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj SCM</td> </tr> <tr> <td>Bachelor International Business</td> <td>Year 3 QE Elec(s) - Maj Strategy</td> </tr> <tr> <td>SBE Exchange Bachelor</td> <td>Bachelor Exchange Courses</td> </tr> <tr> <td>SBE Exchange Master</td> <td>Bachelor Exchange Courses</td> </tr> <tr> <td>SBE Non Degree Courses</td> <td>Bachelor Courses</td> </tr> </tbody> </table>	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
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