# Course Descriptions None 2022-2023

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| 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 | 5-9-2022 | 21-10-2022 | | 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 | PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS 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.<br><br>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).<br>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.<br>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.<br>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

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| Bachelor Business Analytics | Year 3 Elective Courses |
| 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 |