Course Descriptions None 2020-2021

Course Title	Time Series Methods and Dynamic Econometrics
Course Code	EBC4008
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
2	26-10-2020	11-12-2020		X	X		X

Level	Advanced
Coordinator	Ines Wilms For more information:i.wilms@maastrichtuniversity.nl
Language of instruction	English
Goals	The objectives of this course are : - to provide students with an understanding/intuition of the concepts of modern time series methods that are used in econometrics. - introduce the student to fundamental methodological issues in dynamic econometric modelling (nonstationarity, nonstandard asymptotic theory). - to provide students with some experience in analyzing univariate and multivariate time series from economics or business.
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 emphasis of this course will be on studying in depth methods and techniques for the analysis of (nonstationary) economic and financial time series. We will cover and discuss issues related to: - dynamic econometric modelling - modelling nonstationary processes - asymptotic theory for dependent and integrated processes - unit roots (representation, tests, properties), cointegration and VECMs. Empirical applications as well as simulation experiments will also be considered to provide students with practical experience in analyzing economic and business time series.
Literature	The main textbook used in this course will be: - Hamilton, J.D. (1994), Time Series Analysis, Princeton University Press, Princeton. You might also want to consult the following book: - Davidson J. (2000), Econometric Theory, Blackwell Publishing, Oxford. The first book is mathematically very concise, while the second book is more narrative of nature. Students often perceive the two books as complementary.
Prerequisites	- Econometric methods (EBC2111), Stochastic Processes (EBC4004). - Exchange students need to have a solid background in econometric methods, probability theory, mathematical statistics, and some knowledge in stochastic processes (some familiarity with Brownian Motion theory is important). Exchange students need to have obtained a Bachelor degree and an advanced level in mathematics and probability and statistics. An advanced level of English.
Teaching methods	PBL / Presentation / Lecture / Groupwork
Assessment methods	Final Paper / Participation / Written 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

Master Business Research - No specialisation	Year 2 Free Elective(s)
Master Business Research - Operations Research	Year 1 Elective Course(s)
Master Business Research - Operations Research	Year 2 Elective Course(s)
Master Econometrics and Operations Research	E&OR Electives
Master Economic and Financial Research - Econometrics	Year 1 Core Course(s)
Master Economic and Financial Research - Econometrics	Year 1 Elective Course(s)
Master Economic and Financial Research - No specialisation	Year 1 Elective Course(s)
Master Financial Economics - Asset Pricing	Elective Course(s)
Master Financial Economics - Banking	Elective Course(s)
Master Financial Economics - Financial Analysis	Elective Course(s)
Master Financial Economics - No specialisation	Elective Course(s)
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses