

Course Descriptions Bachelor 2021-2022

Course Title	Econometric Methods II							
Course Code	EBC2120							
ECTS Credits	6,5							
Assessment	Whole/Half Grades							
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
	4	31-1-2022	25-3-2022			X	X	
Level	Intermediate/Advanced							
Coordinator	Martin Schumann For more information:m.schumann@maastrichtuniversity.nl							
Language of instruction	English							
Goals	<p>(1) Thorough understanding of standard econometric models and methods for the analysis of independent data; independent data are typically cross-sectional, as opposed to time series which are sequential and generally serially dependent.</p> <p>(2) Additionally, some practical experience with the application of the methods, the interpretation of the models, and the evaluation of inferences.</p> <p>(3) In particular, providing background and warming up for students about to write a Bachelor thesis on an empirical topic.</p>							
Description	<p>The course is designed as a follow-up to the second-year course Econometric Methods I (EBC2111), reviewing known methods somewhat more formally before introducing the new ones. The following topics will be covered.</p> <p>(1) The Normal regression model and Maximum Likelihood (ML)</p> <p>(2) Endogeneity and Instrumental Variable (IV) methods</p> <p>(3) Generalised Method of Moments (GMM)</p> <p>(4) Discrete choice models (LPM, logit, probit etc.)</p> <p>(5) Censoring and selection (tobit, heckit)</p> <p>(6) Linear equation systems (SURE, SEM)</p> <p>(7) Panel data models (POLS, FE, RE, FD ...).</p> <p>These topics will be treated at a fairly rigorous level, starting from abstract assumptions about a multivariate world described in terms of vectors and matrices.</p>							
Literature	<p>Hansen, Bruce E. (2018): Econometrics, University of Wisconsin webpage http://www.ssc.wisc.edu/~bhansen/econometrics/</p> <p>Greene W.H. (2008): Econometric Analysis, 7th edition, Pearson Prentice Hall.</p> <p>Davidson R. & J.G. MacKinnon (2004): Econometric Theory and Methods, Oxford University Press.</p> <p>Wooldridge J.M. (2010): Econometric Analysis of Cross-Section and Panel Data, 2nd edition, MIT Press, Cambridge, MA. (First half).</p> <p>Cameron A.C. & P.K. Trivedi (2005): Microeconometrics, Cambridge University Press. (First half).</p>							
Prerequisites	Linear algebra, mathematical statistics (EBC2107), Econometric Methods I (EBC2111) or the equivalent. Familiarity with statistical software like Stata or EViews and R.							
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork / Skills							
Assessment methods	Final Paper / Attendance / Participation / Written Exam / Assignment							
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 Econometrics and Operations Research				Year 3 Core Course(s)			
	Bachelor Econometrics and Operations Research				Year 3 Elective Course(s)			