

## Course Descriptions None 2024-2025

Course Title Panel Data Econometrics  
 Course Code EBC4006  
 ECTS Credits 6,5  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	3-2-2025	30-3-2025	X		X		X

Level Advanced  
 Coordinator Martin Schumann For more information:m.schumann@maastrichtuniversity.nl  
 Language of instruction English

Goals Thorough understanding of the most frequently used econometric models and methods for the analysis of panel data, categorical choice and limited dependent variables.  
 Some practice in the application of the methods, the interpretation of the models, and the evaluation of inferences.  
 The experience of conducting a theoretical, experimental and/or empirical investigation of the methods.

Description The main topics of the course are (1) unobserved effects models for panel data, (2) probit and logit models for discrete choice, (3) tobit and related censored regression models, (4) models dealing with sample selectivity, and (5) the estimation of average treatment effects (a.k.a. policy impact evaluation). Dynamic extensions of the models are considered when feasible. Estimation and testing methods are applied in a number of empirical assignments and their properties are investigated.

Literature Cameron, A.C. and P.K. Trivedi (2005): Microeconometrics, Methods and Applications, Cambridge University Press 2005. ISBN 978-0521-84805-3.

Wooldridge, J.M. (2010): Econometric Analysis of Cross Section and Panel Data, Second Edition. MIT Press, Cambridge, MA, 2010, 2nd ed., ISBN 0-978-0-262-23258-6.

These references will be supplemented with a reading list of journal articles and book chapters.

Prerequisites This course is in transition for the master Business Research.  
 See the Master Education and Examination Regulations for more information.

The following rule applies to master Business Research students who started the programme prior to academic year 2024-2025.

TRANSITIONAL REGULATION (EBC4006):

The master Business Research has been discontinued.

Courses of the Business Research master's programme will continue to be offered until and including academic year 2025-2026 with exam opportunities running until and including 2026-2027.

### PREREQUISITES:

\* Calculus, matrix algebra, probability, mathematical statistics, asymptotic theory, linear statistical models.

\* Familiarity with statistical software like Stata and Gauss, Matlab, or R.

\* Econometric methods at the level of Greene (2008) or Davidson & MacKinnon (2004), ideally as in courses Econometric Methods I (EBC2111) and Econometric Methods II (EBC2120).

The course is intended for students in the Econometrics Master programme as well as others with a comparable background and motivation. FLUENCY IN MATRIX ALGEBRA AND IN ASYMPTOTIC THEORY is necessary.

An advanced level of English.

Teaching methods Presentation / Lecture / Assignment / Papers / Groupwork / Research

Assessment methods Final Paper / Attendance / Assignment / 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

Master Business Research - No specialisation	Transitional Regulation
Master Business Research - Operations Research	Transitional Regulation
Master Econometrics and Operations Research	Elective Course(s)
Master Economic and Financial Research - Econometrics	Elective Course(s)
Master Economic and Financial Research - Econometrics	Year 1 Core Course(s)
Master Economic and Financial Research - No specialisation	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