Course Descriptions None 2026-2027

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

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	1-2-2027	25-3-2027	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	* 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.
Transitional Regulations	<ul class="trcohorts"> - Master Business Research - No specialisation [2023-2024 and earlier] - Master Business Research - Operations Research [2023-2024 and earlier] - In 2024-2025 and 2025-2026 education and exam/resit opportunities are offered. - In 2026-2027 exam/resit opportunities are offered. - From 2027-2028 onwards, the course is cancelled. <table><col style="width: 200px;"><col style="width: 120px;"><col style="width: 120px;"><col><thead><tr><th>Academic Year</th><th>Education</th><th>Exam/Resit</th><th>Replacement(s)</th></tr></thead><tbody><tr><td>2024-2025 - 2025-2026</td><td>X</td><td>X</td><td> </td></tr><tr><td>2026-2027</td><td> </td><td>X</td><td> </td></tr><tr><td>2027-2028 onwards</td><td> </td><td> </td><td> </td></tr></tbody></table>
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	In transition - Year 2 Free Electives
Master Business Research - Operations Research	In transition - Year 1+2 Elective Courses
Master Econometrics and Operations Research	E&OR Electives
Master Economic and Financial Research - Econometrics and Operations Research	Elective Courses
Master Economic and Financial Research - Econometrics and Operations Research	Year 1 Core Courses
Master Economic and Financial Research - No specialisation	Elective Courses
Master Financial Economics - Asset Pricing	Elective Courses
Master Financial Economics - Banking	Elective Courses
Master Financial Economics - Financial Analysis	Elective Courses
Master Financial Economics - No specialisation	Elective Courses
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses