Course Descriptions None 2026-2027

Course Title	Empirical Econometrics 1
Course Code	EBC4184
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	31-8-2026	16-10-2026	X		X		

Level	Intermediate/Advanced
Coordinator	Martin Schumann For more information:m.schumann@maastrichtuniversity.nl
Language of instruction	English
Goals	The purpose of this course is to review and discuss a number of econometric and statistical techniques that are essential for empirical research in economics.
Description	This course is designed to teach students about modern applied microeconometrics. In this course, we will introduce popular econometric methods used in recent applied papers. To do so, we will review the main theory necessary for gaining an intuitive understanding of the method. Students will apply their knowledge using the statistical software packages R and Stata. To follow this course, students should be familiar with basic matrix algebra, probability theory and statistics. Content: 1. Review of linear regression 2. Instrumental variables, Generalized Method of Moments 3. Panel data model 4. Difference-in-Differences 5. Regression Discontinuity Design 6. Nonlinear models 7. Mixed topics (e.g. basics of quantile regression, presentations)
Literature	* Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data. 2nd edition, MIT press. * Greene, W. H. (2000). Econometric analysis, 8th edition, Pearson education. * Angrist, J. D., & Pischke, J. S. (2008). Mostly harmless econometrics. Princeton university press. * Cameron, A. C., & Trivedi, P. K. (2005). Microeconometrics: methods and applications. Cambridge university press.
Prerequisites	We assume that the students entering the Research master and following this course have at least a level comparable to the IES bachelor course Empirical Econometrics; have a good working knowledge of matrix algebra, of integrals calculus and are familiar with concepts from probability theory and mathematical statistics.
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 / Assignment / Groupwork
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 Methodology Electives
Master Business Research - Operations Research	In transition - Year 1+2 Elective Courses
Master Economic and Financial Research - No specialisation	Year 1 Compulsory Courses