

## Course Descriptions Bachelor 2023-2024

|   |   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
|---|---|---|-----------------------|---|---------------------------|-----|-----|-----|-----|---|----------|-----------|--|--|---|---|--|
| Course Title  | Econometric Methods II  |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Course Code   | EBC2120   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| ECTS Credits  | 6,5   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Assessment  | Whole/Half Grades   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Period  | <table><tr><td>Period</td><td>Start</td><td>End</td><td>Mon</td><td>Tue</td><td>Wed</td><td>Thu</td><td>Fri</td></tr><tr><td>4</td><td>5-2-2024</td><td>28-3-2024</td><td></td><td></td><td>X</td><td>X</td><td></td></tr></table>  | Period  | Start                 | End   | Mon                       | Tue | Wed | Thu | Fri | 4 | 5-2-2024 | 28-3-2024 |  |  | X | X |  |
| Period  | Start   | End   | Mon                   | Tue   | Wed                       | Thu | Fri |     |     |   |          |           |  |  |   |   |  |
| 4   | 5-2-2024  | 28-3-2024                                     |                       |   | X                         | X   |     |     |     |   |          |           |  |  |   |   |  |
| Level   | Intermediate  |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Coordinator   | Martin Schumann For more information:m.schumann@maastrichtuniversity.nl   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Language of instruction   | English   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Goals   | (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.<br>(2) Additionally, some practical experience with the application of the methods, the interpretation of the models, and the evaluation of inferences.<br>(3) In particular, providing background and warming up for students about to write a Bachelor thesis on an empirical topic.   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Description   | Dear student, Welcome to Econometric Methods II! In this course, you will learn about popular econometric models and the accompanying theory from a micro-econometric perspective. Unlike in time-series econometrics, we will mostly consider econometrics of large cross-sections where independence of individuals is a credible assumption. Our main concern will be to tackle endogeneity due to the observational nature of most data sets. Moreover, we will learn how to incorporate nonlinearities in our models. Besides the theory, we will also discuss applied examples in class and in the tutorials. Moreover, we will use real data in Stata and simulations in R to gain deeper insight into the small sample properties of the estimators considered here. While this course covers (mostly) the classic "structural" approach to micro-econometrics, we will also introduce "quasi-experimental" methods that have gained a lot in popularity in the last two decades. |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Literature  | * Hansen, Bruce: Introduction to Econometrics.<br>* Greene, W.H.: Econometric Analysis.<br>* Angrist, J. & S. Pischke: Mostly Harmless Econometrics.<br>* Wooldridge, J.: Econometric Analysis of Cross-section and Panel Data, 2nd edition.<br>* Cameron, A.C. & P.K. Trivedi: Microeconometrics.  |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| 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  | Presentation / Lecture / Assignment / Papers / Groupwork  |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Assessment methods  | Attendance / Written Exam / Assignment / Take home exam   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Evaluation in previous academic year                            | For the complete evaluation of this course please click <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| This course belongs to the following programme / specialisation | <table><tr><td>Bachelor Econometrics and Operations Research</td><td>Year 3 Core Course(s)</td></tr><tr><td>Bachelor Econometrics and Operations Research</td><td>Year 3 Elective Course(s)</td></tr></table>   | Bachelor Econometrics and Operations Research | Year 3 Core Course(s) | Bachelor Econometrics and Operations Research | Year 3 Elective Course(s) |     |     |     |     |   |          |           |  |  |   |   |  |
| Bachelor Econometrics and Operations Research                   | Year 3 Core Course(s)   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |
| Bachelor Econometrics and Operations Research                   | Year 3 Elective Course(s)   |   |                       |   |                           |     |     |     |     |   |          |           |  |  |   |   |  |