## Syllabus

## Behavioral and Digital Economics for Effective Management (BDEEM)

Course title	Panel Data Econometrics
Teacher	Emmanuel Peterlé
Shared course	□ No X Yes, with M2 QAE
Hourly volume	18
Evaluation methods	Exam
Course summary	In this Panel Data Econometrics course, students will be introduced to fundamental concepts and techniques for panel data analysis - data collected over time on a cross-section of units, such as individuals, households, or businesses. Key topics include the development and estimation of various models, including fixed effects, random effects, and dynamic panel models. Students will also learn to tackle the usual challenges met when using panel data and perform hypothesis testing and diagnostic checks using the R software. This course aims to equip students with the practical skills to undertake real-world econometric analyses involving panel data.
Skills	<ul> <li>Following this course, student will have developed the ability to: <ul> <li>Choose the correct visualization method to represent data with panel structure.</li> <li>Understand and explain the challenges associated with the statistical processing of panel data.</li> <li>Appropriately model observed phenomena through panel data.</li> <li>Estimate various models and perform various tests using a statistical software (R).</li> <li>Take advantage of panel data structures to identify causal phenomenons.</li> </ul> </li> </ul>