



## R TRAINING COURSE 2020/21

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**Syllabus** (subject to revisions)

### Pre-sessional online course

#### Introduction to R and data management tools

- Understanding R's command syntax
- Opening, browsing, saving, sorting, importing and exporting datasets
- Using coding files
- Saving results output
- Renaming, labelling, ordering, creating and replacing variables
- Merging, appending and manipulating datasets

### Core programme

#### Session 1: Simple regression analysis

- OLS
- Hypothesis testing
- Instrumental-variable estimators

#### Sessions 2-3: Static and dynamic panel data models

- Fixed effects estimator
- Arellano–Bond estimator
- Blundell – Bond System GMM estimator

#### Session 4: Time series methods

- Testing for unit roots (ADF)
- Vector autoregressions
- Co-integration tests