

## Econometric Methods

### Second year module

This module involves statistical theory and matrix algebra: statistical distributions; revision of matrix algebra; matrix differentiation; Econometric theory; Gauss-Markov; theorem; k-variable linear regression model; Statistical Inference: single parameter tests and interval estimators of coefficients; linear restrictions.

### Learning outcomes

On completion of this module the student will be able to using matrix notation: understand basic econometric theory; .derive the OLS estimator; express the classical assumptions for OLS; carry out statistical tests; prove the Gauss-Markov theorem; derive the GLS estimator; understand under what circumstances the GLS estimator is appropriate.

### Assessment

- 2 hr written examination 100%