
Econometrics Training Course for Executives: Interpreting Regressions, Forecasts and Model Risk

25 – 29 July 2027
Muscat





Econometrics Training Course for Executives: Interpreting Regressions, Forecasts and Model Risk

Ref: 388_23684 **Date:** 25 – 29 July 2027 **Location:** Muscat **Fees:** 4300 GBP

Programme Summary

Econometrics training course for executives, lasting one week at managerial level and ending in an econometric evidence pack for one business decision. Managers receive regression tables and forecasts every month, yet few are equipped to ask whether a coefficient is reliable, whether a trend will hold or whether a model was built to reach a preferred answer. The programme moves from principles to diagnosis of model problems, to design of regressions and forecasts, then to application on one live decision. Mars Training Centre UK delivers this econometrics programme for senior decision makers.

The Business Case

When econometric results are accepted without challenge, pricing, budgeting and investment choices rest on relationships that are weaker than they appear, forecasts miss turning points and analysts are rewarded for confident answers instead of honest ones. Leaders who can read a regression, ask how it was specified and test its limits can set better assumptions, stop unreliable models from reaching a board paper and agree what evidence would change a decision.

- **Forecast Accuracy:** Improves as planning assumptions are tied to tested relationships, not to single estimates.
- **Decision Quality:** Rises as managers separate correlation from causation before committing resources.
- **Model Risk Exposure:** Falls as weak or untested models are identified and held back.

Principles and Evidence Base

- **Ordinary least squares regression:** It supplies the core method for reading relationships between variables in Session 1 and Session 3.
- **Hypothesis testing and significance:** It guides the judgement of whether a result is reliable in Session 3.
- **Model specification and its common problems, including multicollinearity and heteroskedasticity:** They frame the diagnostic review in Session 2.
- **Time series forecasting:** It structures the comparison of forecast methods and errors in Session 3 and Session 4.



Intended Participants

- Senior managers who approve budgets, prices or investments using analyst forecasts.
- Heads of function who commission economic or statistical studies and must judge their findings.
- Strategy and planning leaders who build assumptions from historical relationships.
- Finance and risk leaders who review the models behind targets and limits.

The programme serves banking, retail, energy, telecommunications and public sector bodies where managers act on econometric evidence produced by others.

Learning Outcomes

1. Participants will be able to interpret regression coefficients, signs and fit measures in business terms.
2. Participants will be able to distinguish correlation from causation in a given managerial claim.
3. Participants will be able to diagnose model problems such as multicollinearity, heteroskedasticity and omitted variables.
4. Participants will be able to evaluate a forecast by comparing methods and error measures.
5. Participants will be able to challenge an analyst model with structured questions before it is used.
6. Participants will be able to justify a decision on the strength of econometric evidence and its stated limits.

Programme Structure

Day 1: Econometrics Principles for Executives

What can econometrics establish about a business relationship, and what can it not?

- Business Question to Model Map
- Correlation and Causation Cases
- Ordinary Least Squares Regression Idea
- Variable Types and Data Structures
- Evidence Strength Ladder

Day 2: Diagnosing Data and Model Problems

Where can a regression mislead, and how are the warning signs found?

- Data Quality and Outlier Screen
- Multicollinearity Check
- Heteroskedasticity Warning Signs
- Omitted Variable Cases
- Residual Plot Reading



Day 3: Designing Regressions and Forecasts

How is a model specified so that its answers can be tested and used?

- Model Specification Worksheet
- Coefficient Interpretation Guide
- Hypothesis Testing and Significance Table
- Time Series Forecasting Methods
- Forecast Error Measures

Day 4: Challenging Results and Managing Model Risk

What questions expose a weak model before a decision depends on it?

- Analyst Challenge Question List
- Out-of-Sample Test Review
- Confidence Interval Reading
- Model Risk Register
- Results Briefing Format

Day 5: Applying Econometrics to One Decision

Is the evidence strong enough to support the decision on the table?

- Applying the Session 2 Problem Checks to the Case Model
- Reviewing the Session 3 Specification Against the Business Question
- Testing the Session 4 Challenge List on the Case Forecast
- Rehearsing the Decision Briefing
- Completing the Econometric Evidence Pack

Methodology

The programme uses a data workshop built on anonymised sales, cost and market series with regression output already prepared. Participants read the output as sponsor, analyst and reviewer, take one claim from a result to a decision, and record which doubts remain. Software is used only to display results, so attention stays on judgement rather than on running models.

- Suggested activity: Reading a regression table and stating in plain words what each coefficient says.
- Suggested activity: Spotting the flaw in a confident forecast presented by an analyst.
- Suggested activity: Questioning a model before a panel acting as an investment committee.



Capstone Output

Each participant completes an econometric evidence pack for one business decision. It holds the question, a plain-language reading of the key results, a list of diagnostic concerns, the forecast comparison, and a statement of what the evidence can and cannot support. The pack is used to brief a decision meeting, direct the analyst team on further tests and record the assumptions for later review.

Frequently Asked Questions

Is this econometrics course suitable for managers without a mathematics background?

Yes. The econometrics content is pitched at managerial level for leaders who read results prepared by others. It assumes familiarity with business reports and basic averages, but no advanced mathematics or programming.

Which methods does econometrics in this programme rest on?

Econometrics here rests on ordinary least squares regression, hypothesis testing, model specification with checks for multicollinearity and heteroskedasticity, and time series forecasting.

How is the econometric evidence pack used at work?

You use the econometric evidence pack to brief a decision meeting, direct analysts on further tests, and record the assumptions and limits behind a forecast for later review.

How does econometrics for executives differ from a general statistics programme?

Econometrics for executives centres on economic relationships, regression and forecasts used in decisions. A general statistics programme centres on probability, sampling and descriptive methods across many fields.