CONCEPT

Government Revenue Forecasting and Tax Policy Modelling: Elasticity and Microsimulation Training

29 March – 2 April 2027
Dubai - Five-star CBD venue



Government Revenue Forecasting and Tax Policy Modelling: Elasticity and Microsimulation Training

Ref: 1583_25400 **Date:** 29 March – 2 April 2027 **Location:** Dubai - Five-star CBD venue **Fees:** 19500 SAR

Introduction:

Government revenue forecasting and tax policy modelling is the subject of this 1-week course for budget office analysts, revenue forecasters and tax policy units, ending with a Revenue Forecast and Policy Costing Pack. Budgets are often built on projections that miss oil price swings, overstate VAT growth and cost tax changes without testing behavioural response. Nominees already prepare revenue estimates or review tax proposals, and teaching is by modelling build on spreadsheet templates. CoreConcept Training Center delivers this government revenue forecasting and tax policy modelling course.

Course Objectives:

- Classify oil, VAT, customs and non-oil revenue streams and reconcile collection data into a clean forecasting base
- Estimate tax elasticity and buoyancy and apply them to project revenue from macroeconomic drivers
- Build time-series and driver-based forecasts for each revenue stream and consolidate them into a medium-term baseline
- Review forecast errors, separate their causes and link tax gap estimates to compliance assumptions
- Cost proposed tax policy changes with static, behavioural and microsimulation methods and report the revenue effect
- Assemble a Revenue Forecast and Policy Costing Pack with scenarios and an uncertainty statement for budget decision-makers

Target Audience:

- Budget office analysts who prepare the annual and medium-term revenue estimates
- Revenue forecasting unit staff who maintain monthly collection series and forecast models
- Tax policy unit analysts who cost proposed rate, base and exemption changes
- Fiscal risk and macro-fiscal analysts who test revenue sensitivity to oil prices and growth
- Revenue authority planning staff who supply collection data and compliance assumptions to the budget office

Course Outline:

Day 1: Revenue Landscape and Forecasting Foundations

- Revenue Source Classification Across Oil, VAT, Customs and Non-Oil Streams
- Revenue Base Mapping and Collection Data Reconciliation Checklist
- Tax Buoyancy Versus Tax Elasticity Definitions and Use Cases
- Revenue Calendar, Seasonality and Collection Lag Profiling
- Current Forecasting Process Audit Against a Naive Baseline

Day 2: Time-Series, Elasticity and Microsimulation Models

- Exponential Smoothing and ARIMA Models for Monthly Collections
- Regression-Based Elasticity Estimation Using Proxy Tax Bases
- Oil Revenue Model Linking Price, Volume and Fiscal Terms
- Tax-Benefit Microsimulation Using Household and Firm Records
- Model Selection Matrix Weighing Accuracy, Transparency and Data Needs

Day 3: Forecast Building by Revenue Stream

- VAT Forecast Build From Consumption, Compliance and Refund Assumptions
- Customs Duty Forecast Using Import Values and Tariff Mix
- Non-Oil Revenue Forecast for Fees, Dividends and Property Income
- Corporate and Personal Income Tax Forecast With Payment Timing Rules
- Medium-Term Revenue Baseline Consolidation and Reconciliation Template

Day 4: Forecast Errors, Tax Gap Links and Policy Costing

- Forecast Error Decomposition Into Macro, Policy and Collection Effects
- MAPE, Bias and Rolling-Origin Backtest for Revenue Series
- Top-Down and Bottom-Up Tax Gap Estimates as Compliance Inputs
- Static, Behavioural and Dynamic Costing of Tax Policy Changes
- Tax Expenditure Costing and Revenue Foregone Estimation Method

Day 5: Modelling Build for the Revenue Forecast and Policy Costing Pack

- Case Organisation Revenue Series Cleaning and Baseline Build
- Case Oil Price Shock Scenario Applied to the Baseline
- Case VAT Rate Change Costed With Microsimulation Results
- Forecast Uncertainty Fan Chart and Risk Statement Drafting
- Revenue Forecast and Policy Costing Pack Completion and Defence

Skills You Will Gain:

- Revenue Series Preparation
- Tax Elasticity Estimation
- Time-Series Forecasting
- Oil Revenue Modelling
- Microsimulation Costing
- Forecast Error Analysis
- Scenario and Sensitivity Design
- Budget Estimate Reporting

Why Attend This Course:

- Deliver a Revenue Forecast and Policy Costing Pack to the budget director, tax policy head and fiscal risk committee
- Decide which model suits each revenue stream and whether a proposed tax change justifies its estimated yield
- Avoid budget shortfalls caused by unreviewed forecast errors, optimistic compliance assumptions and untested oil price paths
- Coach colleagues on backtesting, elasticity checks and costing templates that make estimates repeatable

Conclusion:

Back at work, the participant presents the Revenue Forecast and Policy Costing Pack to the budget director and tax policy head, who use it to set revenue ceilings and to judge proposed tax measures before they enter the budget. Forecasting staff reuse its backtest log and costing templates for each monthly update. After the first budget cycle, the unit should review forecast errors by revenue stream, compare costed policy yields with collections, and update the model assumptions.

Frequently Asked Questions FAQ:

What should participants know before a government revenue forecasting and tax policy modelling course?

Participants should already prepare revenue estimates or review tax proposals and be comfortable with spreadsheets and basic statistics. Bringing anonymised monthly collection series or a recent costing note from their own unit makes the modelling exercises more useful.

How does government revenue forecasting and tax policy modelling differ from a tax administration course?

It focuses on projecting and costing revenue for budget decisions, using time-series, elasticity and microsimulation models. A tax administration course concentrates on registration, audit, collection and compliance operations, and a macro-fiscal course on debt and monetary policy.

Why does government revenue forecasting rely on elasticity as well as time-series models?

Time-series models capture patterns in past collections, while elasticity links revenue to economic drivers such as income or consumption. Together they separate underlying growth from policy changes, so forecasts stay credible when the economy or the tax system shifts.

What do participants take back from the government revenue forecasting and tax policy modelling course?

Participants take back a Revenue Forecast and Policy Costing Pack, plus a backtest log, an elasticity estimation sheet and a policy costing template that can be adapted to their own revenue streams and budget calendar.