# Advanced Computable General Equilibrium Policy Modeling Training Course

11 – 15 July 2027
Nairobi

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**Ref:** 1122_182848 **Date:** 11 – 15 July 2027 **Location:** Nairobi **Fees:** 4500 Euro

## Overview

Advanced Computable General Equilibrium Policy Modelling Training Course is a one-week course for economic analysts, policy modelers and researchers, who leave with a Documented CGE Policy Scenario Model. Participants apply Social Accounting Matrix design, CGE model calibration, macroeconomic closure rules, counterfactual policy shocks and economy-wide impact interpretation to trace linked market and institutional effects. The course separates equilibrium simulation from forecasting and econometric estimation. Agile Leaders Training Center develops advanced computable general equilibrium policy modeling.

## Who Should Attend

- Teams responsible for economy-wide policy and sector analysis
- Teams responsible for Social Accounting Matrix preparation and review
- Teams responsible for CGE model calibration and solution diagnostics
- Teams responsible for designing counterfactual economic shocks
- Teams responsible for welfare and distributional impact interpretation
- Teams responsible for communicating model evidence and limitations

The course assumes participants use economic data, algebraic models and quantitative analysis at work, and it leaves out introductory economics, general forecasting and causal econometric estimation.

## Departments and Industries

The course supports departments and industries that evaluate economy-wide responses to policy, financial, trade or sector changes.

- Economic policy, fiscal analysis and central planning
- Finance, trade and investment analysis
- Agriculture, food systems and rural development
- Energy, environment and infrastructure
- Research institutes, universities and development organizations
- Banking, consulting and economic advisory services

## Learning Objectives

By the end of this course, participants will be able to:

- Build and validate a Social Accounting Matrix account structure
- Apply behavioral equations and calibrate a base equilibrium
- Evaluate closure rules and model assumptions for a policy question
- Design counterfactual shocks and diagnose model solutions
- Analyze sector, fiscal, trade, welfare and distributional effects
- Evaluate sensitivity evidence, limitations and policy conclusions

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## Course Agenda

## Day 1: CGE Architecture and Accounting Base

- Policy Question and Model Boundary Statement
- Economic Agent and Market Flow Map
- Social Accounting Matrix Account Classification
- SAM Row, Column and Macro Balance Checks
- Base-Year Data and Parameter Register

## Day 2: Behavior, Calibration and Closure

- Production and Factor Demand Equation Map
- Household Demand and Institutional Income Structure
- Trade Substitution and Transformation Specification
- Base Equilibrium Calibration Procedure
- Macroeconomic Closure Rule Decision Matrix

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## Day 3: Baseline, Shocks and Model Solution

- Reference Scenario and Baseline Replication Test
- Policy Instrument and Shock Specification Sheet
- Model Solve Status and Residual Diagnostics
- Market-Clearing and Accounting Identity Check
- Cross-Scenario Result Comparison Table

## Day 4: Impact, Sensitivity and Interpretation

- Sector Output, Price and Factor Impact Dashboard
- Fiscal, Trade and Macroeconomic Result Bridge
- Household Welfare and Distributional Effect Matrix
- Elasticity and Closure Sensitivity Test
- Model Limitation and Interpretation Register

## Day 5: CGE Policy Modeling Practice

- Exercise: Validate a Social Accounting Matrix
- Exercise: Calibrate a Base Equilibrium
- Exercise: Configure a Policy Shock and Closure
- Exercise: Interpret Economy-Wide Results
- Capstone Exercise: Documented CGE Policy Scenario Model

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## Practical Exercises

The course uses suggested activities to connect CGE methods with policy and financial questions.

- Suggested activity: trace a tax or subsidy change through producers, households, government and trade accounts
- Suggested activity: balance a simplified SAM and reconcile macro totals before calibration
- Suggested activity: compare alternative closure rules and elasticity values for one policy shock
- Suggested activity: prepare a policy narrative that separates modeled results, assumptions and limitations

## FAQs

### Who suits computable general equilibrium modeling training, and what does it assume?

Economic analysts, policy modelers, researchers and sector specialists suit the training. It assumes experience with quantitative economic analysis, structured data and algebraic relationships.

### How does computable general equilibrium modeling differ from econometrics training?

Computable general equilibrium modeling calibrates simultaneous economy-wide relationships and simulates counterfactual shocks; econometrics training estimates statistical relationships and uncertainty from observed data.

### What role does a Social Accounting Matrix play in a CGE model?

A Social Accounting Matrix records balanced transactions among activities, commodities, factors and institutions, providing the accounting base and benchmark equilibrium used for calibration.

### Why do CGE closure rules matter for policy results?

CGE closure rules determine which macro balances and variables adjust within a simulation, so different choices can change how savings, investment, government accounts, trade and factor markets respond.

## How should CGE model sensitivity be reported?

CGE model sensitivity should compare results across stated elasticity values, closure choices and shock assumptions, showing which conclusions remain stable and which depend on modeling decisions.

## Conclusion

Participants take back a Documented CGE Policy Scenario Model containing a SAM structure, equations, calibration, closures, shocks, diagnostics, impact tables, sensitivity tests and limitations. The model makes economy-wide counterfactual reasoning easier to inspect and reproduce. It supports policy discussion with traceable assumptions and balanced economic relationships.