

DYNAMIC GENERAL EQUILIBRIUM MODELLING COURSE

BEIJING, China 14 - 18 August 2025

Conducted by
Centre of Policy Studies (CoPS), Victoria University
And hosted by Center of Economic Policy and Trade Analysis
(CEPTA) and Digital Economy Laboratory, University of
International Business and Economics(UIBE)

COURSE INFORMATION

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Summary

The Centre of Policy Studies (CoPS) at Victoria University, Melbourne, Australia offers a five-day intensive course introducing participants to a dynamic computable general equilibrium model (CGE) of the Chinese economy - CHINAGEM model and to the GEMPACK software. The course will be hosted by the Center of Economic Policy and Trade Analysis (CEPTA) and the Digital Economy Laboratory, University of International Business and Economics (UIBE) during 14-18 August 2025. The course will be lectured in English and Chinese with tutoring available in Chinese during computer sessions. The key instructors of this course are Professors Peter Dixon, Maureen Rimmer and Dr Xiujian Peng.

Course participants will use an aggregated version of the CHINAGEM model of the Chinese economy. CHINAGEM is a 157-sector dynamic model developed by CoPS. It has been widely used by many institutes and organizations to analyse current economic, social, and environmental issues in China. CHINAGEM is designed for four modes of analysis:

- ***Historical***, where we estimate changes in technology and consumer preferences;
- ***Decomposition***, where we explain periods of economic history in terms of driving factors such as changes in technology and consumer preferences;
- ***Forecast***, where we derive basecase forecasts for the macro economy and industries that are consistent with trends from historical simulations and with available expert opinions; and
- ***Policy***, where we derive deviations from basecase forecast paths caused by assumed policies.

Participants will be introduced to the GEMPACK software. **GEMPACK** (General Equilibrium Modelling PACKage) developed by CoPS, is a suite of economic modelling software. It is especially suitable for computable general equilibrium models, but can handle a wide range

of economic behaviour. Today GEMPACK software is used in more than 900 organisations in over 80 countries around the world.

Rationale for the Dynamic GE Modelling Course

The course should appeal to

- those needing work with, or understand results from, a typical dynamic CGE model like CHINAGEM;
- those wishing to use the theory of dynamic CGE model with GEMPACK as the basis for a model of a country other than China;
- those wishing to get sufficient background in order to learn about multi-regional, multi-country, dynamic and/or forecasting models;
- those wishing to learn the art of applying CGE modelling for practical policy purposes.

Course Outline

The course aims to introduce participants to the ideas and techniques of dynamic CGE modelling, and to equip them to start using, adapting or constructing CGE models for their own simulations. The course offers in-depth training in the following aspects of dynamic modelling:

- the theory underlying the CHINAGEM;
- how to use different types of closures to gain insights into how the Chinese economy evolves over time and the economic and social effects of various policy and other exogenous changes;
- the data requirements of a typical dynamic CGE model;
- formulating exogenous scenarios;
- computing simulations for policy analysis using RunDynam (software for running dynamic models);
- interpreting and reporting results using Back-Of-The-Envelop (BOTE) model technique.

The course program will consist of lectures integrated with extensive hands-on experience with GEMPACK and RunDynam using CHINAGEM model. The course will cover theory, computation, application and result interpretation. Participants in this course will need to bring their own notebook computer (for notebook requirements, see <http://www.copsmodels.com/laptops.htm>).

Documentation and Software

Course participants receive course materials containing

- course notes and lecture slides;
- exercises to be completed in computing sessions;
- documentation of CHINAGEM model and the aggregated model data;
- instructions for installing and using GEMPACK and RunDynam.

Each participant will receive an USB, containing

- an Executable-Image version of the latest GEMPACK software which will allow them to run RunDynam on any modern Windows PC;
- PDF files containing the complete GEMPACK and RunDynam documentation;
- an individual GEMPACK and RunDynam licence for the above software valid for 6 months;
- an electronic version of the CHINAGEM book “CHINAGEM—A Dynamic General Equilibrium Model of China: Theory, Data and Applications”
- all computer files needed to run a training-course version dynamic model of China;

Assumed Background

The course will be of most benefit to people with some familiarity with CGE modelling. For example, it would be an advantage to have completed one of the introductory GE courses such as CoPS’ Practical GE course or the GTAP introductory course.

Preparing for the course

For those participants who have not attended CoPS’ training course, we suggest you study some material prior to the course. Download and work through the MINIMAL course material (<http://www.copsmodels.com/minimal.htm>). The MINIMAL model and course are simplified versions of the ORANI-G model and course -- and use similar notation and software. To go further, you could:

- download and read the ORANI-G document, which you can find at the top of ORANI-G page (<http://www.copsmodels.com/oranig.htm>);
- download and experiment with the free Demonstration Version of GEMPACK (<http://www.copsmodels.com/gpdemo.htm>)

Course Fees Beijing 2025

The training course charge is **AU\$2600** per person.

The fee covers lectures, computing sessions, course materials (including software), morning and afternoon teas, and one course dinner. It does not cover accommodation, or other meals.

Venue and Accommodation

Course Venue:

University of International Business and Economics (UIBE)
No.10, Huixin Eastern Street, Chaoyang District, Beijing, 100029

Accommodation

For information regarding accommodation near the course venue contact:

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COURSE REGISTRATION

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PLEASE PRINT CLEARLY

NAME: _____

ORGANISATION: _____

ADDRESS: _____

PHONE AND FAX: _____

EMAIL: _____

Course fee _____ AUD/RMB

- Pay via credit card – AUDonly
- Pay via electronic funds transfer to VU' s Australia bank at Melbourne (AUD)
- Pay via electronic funds transfer to UIBE at Beijing (RMB)
- Pay by cash (AUDonly)

We will email you details for how to pay when we receive your registration.