

A PHD IN COMPUTABLE GENERAL EQUILIBRIUM MODELLING



Our PhD students have no problem in finding exciting and rewarding PhD topics.

THE CENTRE OF POLICY STUDIES (CoPS) AT VICTORIA UNIVERSITY OFFERS GRADUATE TRAINING LEADING TO PhDS IN COMPUTABLE GENERAL EQUILIBRIUM (CGE) MODELLING.

WHAT IS CGE MODELLING?

CGE modelling is a technique for analysing policies taking account of the whole economy. It is about the macro economy, industries, occupations, regions, the environment and the distribution of income. CGE analysis is undertaken by governments and businesses throughout the world. Applications include analyses of the effects of: trade agreements; carbon trading and other policies to reduce greenhouse gas emissions; water conservation and water trading; economic stimulus; agricultural regulation; immigration; tax reform; vocational training; demographic change; disruptions due to terrorism and epidemics; major events and infrastructure projects; technological changes; mineral discoveries; industrial regulation, unions and labour market dynamics.

CGE MODELLING: THEORY, COMPUTATION DATA AND COMMUNICATION

CGE modelling is a field where economics comes to life. CGE modelling draws on theoretical developments in micro, macro, labour, trade and other areas of economics. CGE modelling applies advanced computational techniques to solve large systems of simultaneous equations. CGE modelling involves meticulous compilation and analysis of data. CGE modelling requires awareness of current policy issues and ability to represent their essence in a formal mathematical framework. And most of all, CGE modelling requires clear communication of results in the national policy debate.

CAREERS IN CGE MODELLING

There are thousands of CGE modellers pursuing successful careers across the globe. The CGE network built around the Global Trade Analysis Project (GTAP) has 12,000 participants (<https://www.gtap.agecon.purdue.edu/>). Our graduates join the world-wide community of CGE modellers. They work in universities and government departments dealing with a broad range of economic policies. They are also found in private organisations, particularly consulting firms specialising in economic advising. The training we give our graduates in theory, computation, data and communication equips them for careers not only in modelling but more broadly in any policy-related role.

WHY STUDY AT COPS?

CoPS has a distinguished staff which includes 6 professors and 10 members who have more than 10 years' experience in CGE modelling. CoPS has supervised over 40 PhDs many of whom occupy major positions. CoPS work is driven by policy relevance. Its research projects are commissioned by governments and other organisations in many countries. Our PhD students have no problem in finding exciting rewarding PhD topics. Throughout its 40 year history, CoPS has been a world leader in the development and application of CGE models. It has pioneered numerous innovations in the field.



CoPS is located opposite the Flinders Street station, on the 14th floor with magnificent views of Melbourne's arts and sports precincts.



Major studies on the economic effects of climate-change have been conducted by Garnaut and Treasury, with CoPS providing the central modelling analyses.

AMONG COPS' ACHIEVEMENTS ARE:

- Creation of Australia's ORANI, MONASH, MMRF, TERM and VURM models which have played a prominent role in almost every Australian economic debate since the 1970s;
- Creation of the GEMPACK Software which is currently used in 550 sites in over 80 countries to create, solve and analyse CGE models;
- Creation of the USAGE model of the US which is used in 6 government departments in Washington DC to analyse issues of global importance;
- Creation of policy relevant models for clients in many other countries including China, India, Pakistan, Nepal, Bangladesh, Taiwan, Malaysia, Japan, Philippines, Indonesia, Brunei, Thailand, Mongolia, Vietnam, PNG, New Zealand, Fiji, Brazil, Venezuela, Ecuador, Mexico, Canada, Spain, Ireland, Finland, Denmark, Poland, Netherlands, Switzerland, Italy, Albania, Egypt, South Africa, Botswana, Zimbabwe, Mozambique, Zambia, Tanzania, Uganda, Saudi Arabia, Oman, Iran and Jordan.

THE CONTRIBUTIONS OF COPS HAVE BEEN RECOGNISED BY ACADEMIA AND THE COMMUNITY MORE GENERALLY BY AWARDS AND EDITORSHIPS:

- 3 fellowships of the Academy of the Social Sciences in Australia
- 2 distinguished fellowships of the Economic Society of Australia
- 3 memberships of the GTAP Hall of Fame
- 4 GTAP research fellowships
- 2 memberships of the Order of Australia
- Editorship of the Springer series in Advances in Applied General Equilibrium Modelling
- Editorship of the Elsevier Handbook of CGE Modeling

INTERESTED? WHAT CAN I DO NEXT?

Visit the CoPS webpage <http://www.copsmodels.com/phdstud.htm> for more information on how to:

- Attend the CoPS PhD orientation day - the next is scheduled for Friday 1 April 2016.
- Apply for a CoPS summer internship. These will be offered to potential PhD candidates for the summer of 2015/16. Successful applicants will work with an experienced staff member on a project for a CoPS client.
- Apply for admission as a PhD candidate at VU in the Centre of Policy Studies.
- Apply for a CoPS Top Up PhD Scholarship.

Or communicate informally with CoPS PhD coordinator Glyn Wittwer (glyn.wittwer@vu.edu.au).



CoPS has done a recent project for the U.S. government on immigration reform. CoPS uses CGE models to analyse big issues for governments around the world.