



Communities in Numbers is a statistical advisory company that also provides training in basic statistics; mapping; applied microsimulation modelling; and programming microsimulation models. All the courses are run by Prof. Robert Tanton, a renowned Australian and International expert on sourcing and analysing data with 20 years experience at the National Centre for Social and Economic Modelling (NATSEM) at the University of Canberra and 20 years experience in the Commonwealth Public Service. He was Director of NATSEM from 2016 to 2020; and was President of the International Microsimulation Association from 2019 to 2024. At NATSEM, he led development of the Child Social Exclusion index; the Index of Wellbeing for Older Australians; the 2021 Dropping off the Edge report for Jesuit Social Services; and small area estimates of housing stress and poverty across Australia.

He conducts a number of courses in microsimulation, including:

- Introduction to microsimulation; and
- Programming a microsimulation model in OpenM++ (Advanced).

Introduction to microsimulation

This course is 2 days, and covers an introduction to microsimulation; static, dynamic, behavioural, and spatial models; and examples of how these models are used.

Importantly, the course has an applied focus using a static microsimulation model in Excel, which shows how tax changes affect poverty rates. These example show how microsimulation models can incorporate a number of changes.

The final applied part of the course uses a model programmed in OpenM++, a language designed for microsimulation modelling. This example shows how parameters can be changed using a web interface, and how tables can be extracted from the UI version of the model.

As this course has an applied content that uses microsimulation models in Excel and OpenM++, there is a maximum of 5 people per course.

Cost: \$10,000 for up to 5 people exc travel and accommodation costs

Programming a microsimulation model in OpenM++

This course is for advanced attendees, or those who have at least done the Introduction to Microsimulation course.

The course shows how microsimulation models should be planned; going from the plan to code in OpenM++; and then the final step, validation of the model. The course is a full day.

As this course has an applied content using a microsimulation model in OpenM++, there is a maximum of 5 people per course.

Cost: \$10,000 for up to 5 people

More Information?



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