

UKMOD Training course

17-18 May 2023

Venue:**Trades Union Congress**

Congress House, Great Russell Street
London, WC1B 3LS

Teaching team: Daria Popova, Matteo Richiardi and Justin Van De Ven

Before the course: install UKMOD

- Download the EUROMOD software engine and the UKMOD model from <https://www.microsimulation.ac.uk/ukmod/access/>. The course will use training data, so you do not need to apply for the real data (but you might wish to do so). Follow the installation instructions.
- If you experience any problem, please email iser-ukmod@essex.ac.uk and we will try to help.

During the course

- Course timetable is in GMT (**UK time**).
- You will need to bring your own laptop, install the UKMOD software and download the model and the input data as explained above.
- The course is organised as a mixture of lectures and hands-on exercises. We will be showing you a step-by-step solution for each exercise.
- Each session includes time for questions as well as a dedicated Q&A session.
- We would welcome your feedback on what went/did not go well and on how we can improve!

Course Programme

Instructors: Justin Van De Ven and Matteo Richiardi

Day 1 – Wednesday, 17 May 2023

Time	Topic
9.30 – 10.00	Arrival and refreshments
10.00 – 11.00	Session 1 • Introduction: static tax-benefit models, distributional analysis and the UKMOD project • How UKMOD works • Exercise 1: Running the model and using the <i>Statistics Presenter</i> for analysis
11.00 – 11.10	Break
11.10 – 12.30	Session 2 • EUROMOD tax-benefit microsimulation language • Exercise 2: Implementing a reform to the UK model and using the <i>Statistics Presenter</i> for analysis
12.30 – 13.30	Lunch break
13.30 – 15.00	Session 3 • The Policy Spine • The Policy functions <i>Elig</i> & <i>ArithOp</i> and the parameters <i>amounts</i>, <i>formula</i>, <i>queries</i> • Exercise 3: Implementing a reform to the Child Benefit, using <i>Elig</i> & <i>ArithOp</i>
15.00 – 15.15	Break
15.15 – 16.45	Session 4 • Handling errors • Types of function • The Policy function <i>BenCalc</i> • Exercise 4: Implementing a reform to the Child Benefit, using <i>BenCalc</i>
16.45-17.00	• Q&A
17.00	End of Day 1

Day 2 – Thursday, 18 May 2023

Instructors: Matteo Richiardi and Daria Popova

Time	Topic
9.30 – 10.00	Arrival and refreshments
10.00 – 11.00	Session 5 • Re-cap of Day 2 (functions <i>Elig</i>, <i>ArithOp</i> and <i>BenCalc</i>) • The policy function <i>SchedCalc</i> • The system functions <i>DefConst</i> & <i>DefIL</i>
11.00-11.10	Break
11.10 – 12.30	Session 6 • Exercise 5: Modifying the income tax in the UK, using <i>SchedCalc</i> and <i>DefConst</i> • Exercise 6: Modifying the benefit cap in the UK, using <i>DefIL</i>
12.30 – 13.30	Lunch break
13.30 – 15.00	Session 7 • The Policy function <i>Allocate</i> • Assessment units and the system function <i>DefTU</i> • Exercise 7: Modifying the benefit unit in the UK, using <i>DefTU</i>
15.00 – 15.15	Break
15.15 – 16.30	Session 8 • Updating indices and the system function <i>Uprate</i> • Variable types and system function <i>DefVar</i> • System function <i>DefOutput</i>
16.30-17.00	• Q&A
17.00	End of Day 2