

## MSc in Mathematical Modelling and Scientific Computing

### Timetable: Hilary Term 2027

| Time         | Mon                                                                                           | Tue                                                                        | Wed                                                        | Thu                                                                                           | Fri                                                                 |
|--------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>9-10</b>  |                                                                                               | L5<br>Stochastic Modelling of Biological Processes<br>Prof. Bruna          |                                                            | L6<br>Finite Element Methods for PDEs<br>Dr Papadopoulos                                      |                                                                     |
| <b>10-11</b> | L5<br>Stochastic Modelling of Biological Processes<br>Prof. Bruna                             | L5<br>Optimal Control<br>Prof. Cohen                                       | L5<br>Computational Algebraic Topology<br>Prof. Nanda      | L6<br>Finite Element Methods for PDEs<br>Dr Papadopoulos                                      | L5<br>Machine Learning<br>Dr Kanari                                 |
| <b>11-12</b> | L1 (weeks 1-3)<br><b>(Core)</b><br>Mathematical Modelling<br>Prof. Thompson                   | L5<br>Elasticity and Plasticity<br>Prof. Vella                             | L5<br>Optimal Control<br>Prof. Cohen                       | L1<br>Optimisation for Data Science<br>Prof. Hauser & Prof. Rebrova                           | L2<br>Mathematical Models of Financial Derivatives<br>Prof. Howison |
| <b>12-1</b>  | L1 (weeks 1-3)<br><b>(Core)</b><br>Mathematical Modelling<br>Prof. Thompson                   | L5<br>Waves and Compressible Flow<br>Prof. Gaffney                         | L1<br>Elasticity and Plasticity<br>Prof. Vella             | L1<br>Optimisation for Data Science<br>Prof. Hauser & Prof. Rebrova                           | L2<br>Mathematical Models of Financial Derivatives<br>Prof. Howison |
| <b>1-2</b>   |                                                                                               |                                                                            |                                                            |                                                                                               |                                                                     |
| <b>2-3</b>   | L1 (week 3 only)<br><b>(Core)</b><br>Case Studies in Mathematical Modelling<br>Prof. Thompson | L1<br><b>(Core)</b><br>Continuous Optimisation<br>Prof. Hauser & Dr Garner | L2<br>Networks<br>Dr Grindstaff & Dr Devriendt             | L1 (week 8 only)<br><b>(Core)</b><br>Case Studies in Mathematical Modelling<br>Prof. Thompson | L1<br>Fridays@2                                                     |
| <b>3-4</b>   | L1 (week 3 only)<br><b>(Core)</b><br>Case Studies in Mathematical Modelling<br>Prof. Thompson | L1<br><b>(Core)</b><br>Continuous Optimisation<br>Prof. Hauser & Dr Garner |                                                            | L1 (weeks 1-3)<br><b>(Core)</b><br>Mathematical Modelling<br>Prof. Thompson                   |                                                                     |
|              |                                                                                               |                                                                            |                                                            | L1 (week 8 only)<br><b>(Core)</b><br>Case Studies in Mathematical Modelling<br>Prof. Thompson |                                                                     |
| <b>4-5</b>   | L2<br><b>(Core)</b><br>Perturbation Methods<br>Prof. Baker                                    | L2<br>Networks<br>Dr Grindstaff & Dr Devriendt                             | L2<br><b>(Core)</b><br>Perturbation Methods<br>Prof. Baker | L2<br>Nonlinear Dynamics, Bifurcations and Chaos<br>Prof. Münch & Dr Hill                     | L5<br>Computational Algebraic Topology<br>Prof. Nanda               |
| <b>5-6</b>   |                                                                                               |                                                                            | L5<br>Waves and Compressible Flow<br>Prof. Gaffney         | L2<br>Nonlinear Dynamics, Bifurcations and Chaos<br>Prof. Münch & Dr Hill                     |                                                                     |