CORE SESSIONS

OR and Data

3

OPTIONS

3 3 hour session 6 6 hour session

Programming

Science Methods Principles of Introduction to OR **Programming** and Data Science 3 3 Python Discrete Event Programming Simulation 3 PART 1 Geographic **6** Visualisation using 3 **OGIS** Python System Dynamics **Programming** PART 2 6 Introduction to Python Network Analysis (3) Programming **Agent Based** PART 3 Simulation 6 3 Getting to Grips Machine Learning with Programming in R Natural Language 6 Processing 3 Forecasting 3 Deep Reinforcement Learning

HSMAs must select to undertake at least 7 of the Option sessions. Please note: options in the second column require completion of the corresponding first column session (for example, 'Deeper into Deep RL' requires completion of the 'Deeper into Machine Learning' option).

SimPy (Part 1)	SimPy (Part 2)
More QGIS	
InsightMaker 3	
Advanced Network Analysis Part 1	Advanced Network Analysis Part 2
MESA 3	
Deeper into Machine Learning	Deeper into Deep RL 3
Named Entity Recognition	Sentiment Analysis 3
Simple Forecasting 3	Advanced Forecasting 3
Advanced R	