# Module lists for 2013/14

*Please Note: This list is correct at time of publishing for module availability in 2013/14. However, students are advised to contact departments directly if they are interested in studying a particular non-Complexity Module, to ensure that it is still timetabled for 2013/14*

## F3P4 MSc in Complexity Science

### *Core*
CO907-12 Quantifying correlation and Spatio-Temporal Complexity
CO901-12 Networks, Self-Organisation and Emergence
CO904-12 Statistical Mechanics and its Applications to Complexity Science
CO903-12 Complexity and chaos in dynamical systems

### *Options (take at least 3, totaling to at least 48 CATS)*
CO902-12 Probabilistic & Statistical Inference
CO923-18 Computational Methods for Complex Systems.
CH926-12 Molecular Modeling
CH927-12 Quantitative Biology
EC941-15 Game Theory
CY903-12 Practical Algorithms and Data Structures

### *Some possible unusual options (requires approval of director)(no guarantees about timetabling!)*
MA4G4-18 Introduction to Theoretical Neuroscience
MA4E7-18 Population Dynamics: Ecology and Epidemiology
MA913-12 Scientific Computing
ST911-12 Fundamentals of Modern Statistical Inference
ST417-15 Topics in Applied Probability
ES93Q-12 Systems Modeling & Simulation
EC980-18 Topics in Economic Theory
PS918-18 Psychological Models of Economic Choice
PS919-18 Economic and Psychological Science
CS904-15 Computational Biology
CS409-15 Algorithmic Game Theory
PX441-15 Quantum Theory of Interacting Particles
CY901-12 High Performance Scientific Computing
IM903-12 Complexity in the Social Sciences
*Other modules from MASDOC, Systems Biology, Engineering, Economics, Psychology, Statistics, MOAC, Computer Science…*

**F3P6&7 MSc in Complex Systems Science year 1**
(Must pass minimum of 37.5 ECTS of taught credit to grade C or above in M1 year)
(1ECTS = 2 CATs)

*Optional Core (take at least 3 but 4 is preferred)*
(a) CO903-12 Complexity and chaos in dynamical systems
(b) CO901-12 Networks, Self-organisation and Emergence
(c) CO907-12 Quantifying correlation and spatio-temporal complexity
(d) CO902-12 Probabilistic & statistical inference

**Options (take at least 39 CATS)**
**4th module from the optional core**
CO923-18 Computational Methods for Complex Systems.
CH926-12 Molecular Modeling
CH927-12 Quantitative Biology
CO904-12 Statistical Mechanics and its Applications to Complex Systems
CY901-12 High Performance Scientific Computing
CY903-12 Practical Algorithms and Data Structures

**Unusual options (requires approval of director)**
**See options and unusual options list for F3P4**

*F3P6&7 MSc in Complex Systems Science year 2*

*(Must pass minimum of 30 ECTS of taught credit at grade C or above in M2 year and total of 70 Taught ECTS credit over M1 and M2 combined)*
*(1ECTS = 2 CATs)*

*Options*
MA5Q3-18 Topics in Complexity Science
CO923-18 Computational Methods for Complex Systems.
CO904-12 Statistical mechanics and its Applications to Complex Systems
CH926-12 Molecular Modeling
CS904-15 Computational Biology
MA4G4-18 Introduction to Theoretical Neuroscience
MA4E7-18 Population Dynamics: Ecology and Epidemiology
MA913-12 Scientific Computing
ST911-12 Fundamentals of Modern Statistical Inference
CY901-12 High Performance Scientific Computing
CY903-12 Practical Algorithms and Data Structures
IM903-12 Complexity in the Social Sciences

*Unusual options* **(requires approval of director)**
**See options and unusual options list for F3P4, but must qualify as M2 standard.**