UNIVERSITY OF OXFORD

DEPARTMENT OF COMPUTER SCIENCE

Selecting Options: 2018-19

To assist you in choosing courses, the various options are listed below, grouped into themes. These are only meant to reflect natural associations of ideas among courses. When considering them you should bear in mind the requirements of the MSc as stated in the Course Handbook. Please note that you will be issued a Course Handbook during the induction week. Thus while you may want to do several courses from one theme, you can expect that you will need to choose courses from different themes to meet the MSc requirements.

Some of the courses listed have formal prerequisites, and these are detailed on the course web pages (see below for a link to this page). Note that a course you have done in your previous degree could fulfil such a prerequisite. Your supervisor will be able to help you decide when this is the case.

You should look at the relevant web page for more informal information on useful background for each course. http://www.cs.ox.ac.uk/teaching/courses/

- Programming:

Course	**Schedule**
Advanced Security	C
Computer Security	B
Concurrency	A
Concurrent Programming	A
Concurrent Algorithms and Data Structures	C
Functional Programming	A
Physically-Based Rendering	C
Principles of Programming Languages	B

- Specification:

Course	**Schedule**
Computer Security	B
Concurrency	A

- Information Structures, Computational Logic and Verification:

Course	**Schedule**
Automata, Logic & Games	C
Computational Complexity	B
Computer-Aided Formal Verification	B
Concurrency	A
Databases	B
Database Systems Implementation	C
Foundations of Computer Science (FOCS)	A
Probabilistic Model Checking	C
Probability & Computing	C
Computational Game Theory	C

- Semantics and Mathematical Structures

Course	**Schedule**
Automata, Logic & Games	C
Categories, Proofs & Processes	C
Categorical Quantum Mechanics	C
Foundations of Computer Science	A
Lambda Calculus & Types	B
Probabilistic Model Checking	C
Quantum Computer Science	C
Probability & Computing	C

- Artificial Intelligence

Course	**Schedule**
Artificial Intelligence	A
Knowledge Representation and Reasoning	B
Machine Learning	B
Advanced Machine Learning	C
Computational Learning Theory	C
Computational Game Theory	C

- Other Courses:
    - Computers in Society (Schedule B)
    - Requirements (Schedule C)