Selecting Options: 2009-10

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 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.

The table also indicates formal prerequisites for each course. 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. Also you should look at the relevant web page for more informal information on useful background for each course.

- Programming:

Course	**Schedule**	**Prerequisite**
Compilers	A	A basic knowledge of Java is recommended
Computer Animation	C	
Computer Security	B	
Concurrency	A	
Concurrent Programming	A	Concurrency, OOP
Functional Programming	A	
Object Oriented Programming	A	
Principles of Programming Languages	A	Functional Programming
Program Analysis	C	

- Specification:

Course	**Schedule**	**Prerequisite**
Computer Security	B	
Concurrency	A	
Introduction to Specification	A	

- Information Structures, Computational Logic and Verification:

Course	**Schedule**	**Prerequisite**
Automata, Logic & Games	C	FOCS
Computational Complexity	B	
Computer-Aided Formal Verification	C	
Concurrency	A	
Databases	B	
Database Systems Implementation	C	

Foundations of Computer Science	A	
Probabilistic Model Checking	C	
Software Verification	C	FOCS
Theory of Data & Knowledge Bases	C	

- Semantics and Mathematical Structures

Course	**Schedule**	**Prerequisite**
Automata, Logic & Games	C	FOCS
Categories, Proofs & Processes	C	
Game Semantics	C	
Foundations of Computer Science	A	
Lambda Calculus & Types	B	
Logic of Multi-Agent Information Flow	B	
Probabilistic Model Checking	C	
Quantum Computer Science	C	
Software Verification	C	FOCS

- Artificial Intelligence

Course	**Schedule**	**Prerequisite**
Computational Linguistics	C	
Information Retrieval	C	
Intelligent Systems I	B	
Intelligent Systems II	B	Intelligent Systems I
Machine Learning	B	

- Other Courses:

    - Computers in Society
    - Bioinformatics & Computational Biology
    - Requirements