

## Theory of Computation (COMP0003)

### Description

**Aims:**

The module aims to introduce students to formal logical reasoning and to fundamental concepts in the theory of computation and formal languages.

**Learning outcomes:**

On successful completion of the module, a student will be able to:

1. identify and reason with the logical content of arguments;
2. recognise, write down and reason about automata and language grammars;
3. carry out standard proofs and refutations involving logic and computational models.

**Content:**

This course introduces students to the theory of computation. The first 5 weeks of the course will focus on mathematical logic, including: propositional logic, first-order logic, proof by induction and modal logic. The second 5 weeks will focus on fundamentals of computation, automata and language theory.

**Requisites:**

In order to be eligible to select this module, a student must be registered on a programme for which it is a formally-approved option or elective choice AND must have A-level Mathematics (or equivalent).

### Key information

<b>Year</b>	2019/20
<b>Credit value</b>	15 (150 study hours)
<b>Delivery</b>	UG L4, Campus-based
<b>Reading List</b>	<a href="#">View on UCL website</a>
<b>Tutor</b>	<a href="#">Dr James Brotherston</a>
<b>Term</b>	Term 1
<b>Timetable</b>	<a href="#">View on UCL website</a>

### Assessment

### Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)