

Logic

Logic is the study of inference: what follows from what. The area is central to many issues in philosophy, mathematics and computer science. Some typical issues in logic are:

- Are there any conclusions for which an infinite number of premises are essential?
- What can and cannot be proved in axiom systems for number theory?
- How can one employ logic to make computers reason more efficiently?
- What role does probability play in inference?

Since the revolution in logic about 100 years ago, and especially since the advent of digital computers, mathematical methods have been central to much logic. The following subjects are the logic subjects offered by the Department of Philosophy which investigate those techniques in a number of different areas. They are available to students who have the appropriate first-year subjects in philosophy, mathematics or computer science.

Subject descriptions

The logic subjects available for science credit are listed below.

The science credit points that will be awarded for the successful completion of these subjects are as follows:

161-016, 12.5 points at 200-level

161-212, 12.5 points at 200-level

161-241, 12.5 points at 200-level

161-246, 12.5 points at 200-level

Logic subjects cannot count towards the science component of the Bachelor of Arts/Bachelor of Science combined course or the science requirement of the Bachelor of Arts and Sciences course.

200-level subjects

161-016 Metatheory

See full subject details on page 4.

161-212 Non-Classical Logic

See full subject details on page 6.

161-241 Mathematical Logic

See full subject details on page 8.

