

Mātai Arorau, Mahi rorohiko Undergraduate Logic and Computation



Do you have a flexible mind capable of creative, speculative thought, precise calculation and practical problem-solving? If you're interested in mathematical logic and its connections to computer science, linguistics or philosophy, a major in Logic and Computation could be the ideal choice for you.

What you will learn

This major is relevant both to theoretical philosophy and the foundations of computer science. It can also be useful for technological applications in artificial intelligence. You'll have the chance to gain sound practical knowledge of programming and logical analysis, and to develop the conceptual, analytical and communication skills needed for a deeper theoretical understanding of the discipline. You'll also study the philosophical and linguistic issues at the root of the science of computation. Logic and Computation is available as a major in the Bachelor of Arts (BA) as well.

There's no need for having studied any sort of computing at high school to be able to major in Logic and Computation. Digital technologies, physics, mathematics and/ or statistics provide helpful background knowledge, but are not essential.

Recommendations

There are no particular prerequisites at the undergraduate level, but familiarity with mathematical thinking will help a lot.

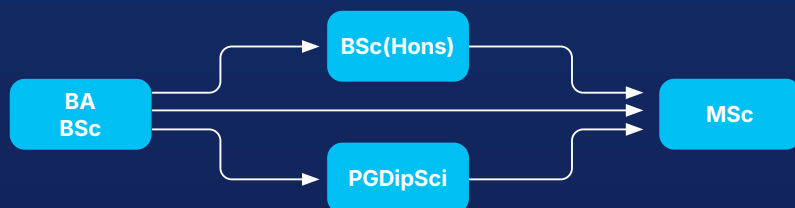
For Logic and Computation we recommend the capstone course LOGICOMP 399.

Choosing a subject

With so many options it's sometimes hard to choose what you want to study, but we've got you covered. You can study a double major with our Bachelor of Science to gain a broader base of skills and knowledge.

Complementary majors include:

- > Computer Science
- > Information and Technology Management
- > Mathematics
- > Physics
- > Psychology
- > Statistics



Career opportunities

A rare combination of skills

Can you imagine life without your smartphone, your computer, or your gaming console? Computing technology is everywhere in everyday life. Every industry is becoming more and more dependent on computing technology and the market for experts in that field continues to expand and diversify.

Logic and Computation provides the link between theoretical thinking and real-world problems. As a graduate you'll acquire computing and programming knowledge, analytical and critical thinking, communication and problem-solving skills that you can apply to investigating complex problems.

With this mixture of practical and theoretical expertise from both the arts and the sciences, you'll leave prepared for a wide range of careers. This is a rare and versatile combination of abilities that are highly valued and sought after in the business world.

Jobs related to Logic and Computation include:

- › Business, systems or security analyst
- › Cloud systems or software engineer
- › Computer consultant
- › Data, e-commerce solutions, software, information architect
- › Database developer or administrator
- › Digital designer
- › Front end, game, systems or web developer

What you can study

- › Algorithms
- › Artificial intelligence
- › Critical thinking
- › Grammar and syntax
- › Logic and rationality
- › Pragmatics



Find out more about how your degree will be structured and what courses you need to take at

auckland.ac.nz/science/ug-logic-comp

Applications close on 8 December.



Kuhua ki tō mātou hāpori, ā, Kimihia tōu Pūtaiao.
Join our community and find your Science.



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Have any questions?
Contact the Student Hub

auckland.ac.nz/student-hubs