Do you want to become part of a revolution in biology? Advances in genetic sequencing, mass spectroscopy, and other genomic and molecular biology techniques have led to an explosion in the amount of biological information generated by the scientific community. Now the challenge facing scientists is how to make sense of this vast amount of information. Bioinformatics seeks to make sense of biological processes on all scales from the molecular level to full ecosystems. It applies to a number of fields of study and includes sequence analysis, gene regulation and expression studies, protein structure prediction, modelling of ligand/receptor docking, genome annotation, comparative genomics, quantitative structure-activity relations, biological network analysis, analysis of quantitative trait loci, tracking and measurement of biodiversity, and modelling of community formation in ecosystems. The University of Guelph Bioinformatics program offers three graduate degrees (MBinf, MSc, and PhD) that provides students with the necessary theoretical knowledge and practical experiences to excel in this highly relevant and exciting field of research.

Program Features

The Master of Bioinformatics (MBinf) is a course-based master’s program:
- Designed for students with an honours bachelor’s science degree in biological / life sciences.
- Usually takes 3 semesters.
- Students take 6 courses and write a major research project.
- Applicants wishing to be considered in the first round of admissions for this program must submit their documents by March 31st. A limited second round of admissions may be considered for outstanding late applicants up to July 15th each year.

The MSc in Bioinformatics is a thesis-based master’s program:
- Designed for students with an honours bachelor’s degree with a background in mathematics, statistics, and/or computational sciences.
- Usually takes 5-7 semesters.
- Students take 4 courses and conduct substantial research leading to a thesis.
- Applicants must secure a faculty advisor themselves.

The PhD in Bioinformatics is a thesis-based doctoral program:
- Applicants must have a MSc or equivalent degree in a related field with a minimum average of 80% over the last two years of study.
- Direct entry into the PhD program is possible and will be considered on a case-by-case basis.
- Usually takes 9 semesters.
- Students are required to take BINF6500.
- Applicants must secure a faculty advisor themselves.

www.uoguelph.ca/bioinf