COLLABORATIVE SPECIALIZATION IN BIOINFORMATICS

Bioinformatics is an increasingly important scientific discipline answering the fundamental questions about the structure, function and evolution of biological entities through the design and application of computational approaches. Fundamental research in these areas is expected to increase our understanding of human health and disease, which will lead to innovation in industry.

As a field of research, bioinformatics crosses traditional disciplinary boundaries such as computer science, chemistry, biology, biochemistry, engineering and the medical sciences. Today, bioinformaticians must be able to appreciate significant research in other fields. Carleton University and the University of Ottawa established the Collaborative Specialization in Bioinformatics to meet this very need.

PARTICIPATING PROGRAMS
Biology, Biomedical Engineering, Mathematics and Statistics.

DEGREES OFFERED
MSc in Biology, MSc in Mathematics and Statistics, MCS (computer science) and MASc in Biomedical Engineering with a specialization in Bioinformatics.

CAREER OPTIONS
Bioinformatics specialists collect, store, analyze, and present complex biological data that can include DNA and genome information, protein sequencing and pathways. They can work in areas such as pharmaceuticals, computer information science and medical technology, designing and manipulating complex databases, creating web-based analytical tools and algorithms, and developing new software for project and research needs.

FALL APPLICATION DEADLINE
March 1, as per home department application deadline

ADMISSION REQUIREMENTS
The requirements for master’s programs that offer the Collaborative Specialization in Bioinformatics are as follows:

- Prior admission to the master’s program in one of the supporting units participating in the program.
- A letter of recommendation from the participating faculty member of the collaborative program, which both recommends admission and indicates the willingness of the faculty member to supervise the candidate’s research program in Bioinformatics.

CONTACT INFO
Further information can be obtained by writing directly to any of the participating institutes or departments, or the relevant program coordinator.

graduate.carleton.ca/programs/bioinformatics-collaborative-masters