Opened in September 2019

Dual Degrees in Population Health Methods and Data Sciences

MSc Public Health Data Science or PhD Digital Public Health
(with Epidemiology, Biostatistics, or Public Health at McGill)

The MSc includes a year of international research and practice in public health data science, from project design to real life health data analysis and communication of results. With multidisciplinary skills in epidemiology, informatics, and statistics, the MSc will provide you with sound knowledge about strengths and limitations of digital technologies and their use in public health research and practice.

The PhD will build on this foundation.

Master of Science

Multidisciplinary objectives

› Epidemiology
Translating a public health/clinical problem into a research question, designing the research plan for surveillance systems, observational and experimental studies (i.e. clinical trials), evaluating the validity and the causality of an association.

› Statistics
Methods for supervised and unsupervised statistical analysis and modelling of biomedical data (including high-di-mensional and time-to-event data), statistical learning, data mining, data integration, advanced computational statistics.

› Informatics
Architectures of data integration (i2b2, Transmart), interoperability, knowledge representation (terminologies, ontologies), natural language processing, data visualization, programming, cloud computing and Hadoop, linked open data, security, confidentiality and integrity of data.

Student Profile

Background for PhD (e.g. master level) in at least one of these disciplines

Reasons to apply?

› Original “data-centred” curriculum
› Interdisciplinary teams working on real case studies
› Practicum hosted by a research team or industrial partners
› Flipped classrooms teaching to develop skills transfer

Location
ISPED, Bordeaux France - McGill University, Montreal, QC

Number of students: 20 maximum in MSc Bordeaux; 5 Dual Degrees max Per degree level

For Further Information: DualDegrees.Bordeaux@mcgill.ca