Master of Science

Epidemiology
Health of Populations

While medical doctors investigate disease in individual patients, epidemiologists investigate the health of populations. Studying diseases and their possible risk factors allow epidemiologists to propose actions and then measure whether the health situation improves as a result of these actions. Thanks to such proposals, buses are now increasingly fitted with fine particle filters and children sleep under mosquito nets that protect them from malaria-carrying mosquitoes. Millions of lives have been saved and many people have benefitted.

Epidemiologists also study disease outbreaks (e.g. food contamination), conduct disease surveillance, identify possible health risk factors and propose measures for disease screening (e.g. against cancer). To do this, epidemiologists design field studies to collect and analyse data, using a variety of methods and often as part of large multi-disciplinary teams.

Epidemiologists work in research institutions, in governmental agencies and in industry. Epidemiology offers the scientific basis from which to improve overall public health, as it provides essential information for better planning.

The optimal foundation for an MSc in Epidemiology is a basic training in the natural sciences, such as biology and biochemistry, or in medicine. But epidemiologists also come from a wide variety of other backgrounds, such as geography, demography, psychology or statistics.

Course Description

The MSc programme in epidemiology at the University of Basel is run by the Swiss Tropical and Public Health Institute (Swiss TPH), an internationally recognised centre for public health excellence. The course language is English.

The thesis work – which extends over a full year – is usually embedded in a research project in one of Swiss TPH’s units, most often within the Department of Epidemiology and Public Health. The MSc thesis work is typically related to a field-based project in Switzerland or abroad.

Admission Criteria

A Bachelor of Science in the natural sciences, medicine or veterinary medicine, with a minimum average degree of 5. Alternatively, students with an average grade below 5 can pass the GRE subject test in “Quantitative Reasoning” with a score in the top 35%. Students with a BSc in a different field are encouraged to apply and will be assessed individually. Deadline for registration is 30 April, for an Autumn start date in the same year. The deadline for students completing a BSc at the University of Basel is mid-August of the same year.

Swiss TPH

The Swiss Tropical and Public Health Institute (Swiss TPH) was founded in 1943 as the Swiss Tropical Institute (STI). It is a world-renowned institution for teaching, research and services in the field of international health. Swiss TPH is an associated institute of the University of Basel, the oldest university in Switzerland.