

# EPIDEMIOLOGY

## Specialized Master's degree program

Master of Science: MSc in Epidemiology

The Specialized Master's degree program in Epidemiology at the University of Basel is run by the Swiss Tropical and Public Health Institute (Swiss TPH), an internationally recognized center for public health excellence. The program centers around (1) teaching the basics of epidemiology, biostatistics and public health, and (2) the pursuit of an epidemiological research project. Epidemiologists investigate the health of populations, study disease and possible risk factors, propose actions and then measure whether the situation has improved. They also study disease epidemics such as COVID-19, conduct disease surveillance, identify possible health risk factors and propose measures of disease screening. To this end, epidemiologists design field studies, collect and analyze data using a variety of methods, often in the frame of large teams. Multi-disciplinarity is often important, as is the ability to deal with societal and cultural factors.

### Focal area of teaching and research

The main goals of the MSc course in epidemiology are the following:

- To understand the issues raised by health problems at individual and population level, and the standard methods and measures to describe them.
- To understand the key concepts in epidemiology and biostatistics, and their interrelationships.
- To have an in-depth understanding of the standard methods and study designs in epidemiologic research.
- To be able to plan and execute independently basic epidemiologic studies, to analyze and interpret them, and to report them orally and in writing.
- To be able to review critically research questions and studies in the field of epidemiology, and to place them in a wider public health concept.

### Course structure Master studies

The Master of Science degree is a postgraduate degree that requires a successfully completed Bachelor's program. The program awards 120 ECTS credits in total. The Specialized Master's degree program Epidemiology is a so called «mono-course» consisting of only one core subject. Supervised practical work over the course of one year constitutes the core of the studies.

<b>Curriculum Master's Degree in Epidemiology</b>	<b>KP</b>
Foundations in Epidemiology	15
Biostatistics and Computing	15
Global & Public Health	10
Transferable Skills and Competences	5
Advances in Epidemiology, Statistics and Global & Public Health	15
Master's thesis	50
Master's examination	10
<b>Total</b>	<b>120</b>

One ECTS credit point roughly equals 30 hours of study.

### Course language

The language of instruction is English. The Master's thesis is generally to be written in English.

### Exams

Student performance is assessed through course accompanying certificates, proof of course participation according to study contracts, a Master's thesis and through a Master's examination.

### Language stays / Internships

No language stays or internships are required, although a good command of English is required.

### Combination of subjects

The degree programs at the Faculty of Science are generally mono-courses with the possible addition of an in-depth subject and an elective subject.

### Start of program

The program is to be started in the fall semester.

### Duration of study

The Master's program lasts four semesters. There are no restrictions on the duration of study. Part-time studying resulting in a longer study time is possible (upon request).

### Further degrees

**Doctorate:** A Master of Science in Epidemiology is the usual basis for a doctorate in Epidemiology/Public Health/Biostatistics, but it is usually not a prerequisite. Trans-faculty doctorates are possible in the fields of epidemiology, history of the sciences, medical-biological research and pharmacology. The doctoral studies last roughly three years. After the acceptance of the dissertation there follows an oral examination covering the postgraduate studies in the doctoral subject.

### Career opportunities

Holders of a Master of Science in Epidemiology have good possibilities to work in academia, for governmental health departments, for international organizations, for NGOs in Switzerland or elsewhere, or alternatively in the health industry, including drug companies. Work opportunities exist both in developing and in industrialized countries, working on both chronic and infectious diseases.

### Admission

The following degrees of a Swiss University allow for direct admission to the Specialized Master's degree program Epidemiology: Bachelor of Science (BSc) in Biology, Human, Dental or Veterinary Medicine, Pharmaceutical Sciences, Nursing Science, Sciences et technologies du vivant, Agricultural Sciences,

Forestry Sciences, Nutritional Sciences, Applied Life Sciences, Sports Sciences, Biochemistry, Psychology, Sociology, Geography, Environmental Sciences, Mathematics, Computer Science or in Economics.

A minimum average mark of 5.0 for all relevant BSc degrees, including 2 ECTS in Biology and 2 ECTS in mathematics/biostatistics is required. Students with a BSc in a different field will be assessed individually for equivalence. Students with a relevant BSc degree but an insufficient mark can alternatively pass the GRE® General Test in the area of «Quantitative Reasoning» with a score in the top 35%. (GRE = Graduate Record Examinations®).

Other Swiss or foreign university degrees have to be approved by the respective teaching committee of the Faculty of Science.

Further information and regulations can be found in the study regulation and the study program for the Master's degree program Epidemiology: [www.bio.unibas.ch](http://www.bio.unibas.ch)

Binding information under: [www.unibas.ch/admission](http://www.unibas.ch/admission)

## Application

Application under [www.unibas.ch/application](http://www.unibas.ch/application); the application fee amounts to CHF 100.-. Application deadline for the fall semester is April 30th. Students of the University of Basel see: [www.unibas.ch/de/Studium/Im-Studium/Rueckmelden/Masterstudium.html](http://www.unibas.ch/de/Studium/Im-Studium/Rueckmelden/Masterstudium.html). The application deadline for Basel students is published there.

## Enrollment

The letter of admission also informs students on the procedure of enrollment. In general, students with a Swiss educational background do not have to be present in person for enrollment.

## Tuition fees and scholarships

**Tuition fees** per semester (also for examination semesters): CHF 850.-

Individual costs of living etc. are not included.

**Scholarships and student loans:** Applications should be sent to the responsible office of the canton in which the parents are eligible to pay their taxes. No support is available by the course organizers.

## Mobility

Semesters abroad are possible and supported by scholarship programs. The mobility programs facilitate the stay at other Swiss universities or foreign universities. Further Information: Student Exchange, Petersplatz 1, 4001 Basel, T +41 61 207 30 28, [mobility@unibas.ch](mailto:mobility@unibas.ch)

## Further information

**Guidelines and regulations** of the Master's Degree in Epidemiology see [www.bio.unibas.ch/de/reglemente](http://www.bio.unibas.ch/de/reglemente)

## Information about the University of Basel

- The course directory can be found under: [www.unibas.ch/en/Studies/Course-Directory.html](http://www.unibas.ch/en/Studies/Course-Directory.html)
- Basler Studienführer: [www.studienberatung.unibas.ch](http://www.studienberatung.unibas.ch)
- Website: [www.unibas.ch](http://www.unibas.ch)

## Student advice

Questions regarding the study of Epidemiology can be discussed personally at the Student Administration Office of the Swiss Tropical and Public Health Institute (registration via e-mail or phone).

## Contacts

### **Study counselors/course coordinators for the Master program Epidemiology**

Coordinator: Prof. Christian Lengeler, +41 61 284 82 21, e-mail: christian.lengeler@unibas.ch / christian.lengeler@swisstph.ch

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### **Student Administration**

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### **Student Advice Center Basel**

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## Imprint

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