Epidemiology

Specialized Master’s degree program

Master of Science: M Sc in Epidemiology

Curriculum

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 and biostatistics, and (2) on the pursuit of an epidemiological research topic. 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 outbreaks, 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.
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One ECTS credit point roughly equals 30 hours of study.

**Course language**  
The language of instruction is English. The Master’s thesis is to be written in English.

**Exams**  
Student performance is assessed throughout all courses by a variety of means of assessment, as well as a Master's thesis and through the final 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 with a longer study time is possible (upon request).

**Further degrees**  
**Teaching diploma for secondary schools**  
The teaching diploma enables teaching within the general school system at the Secondary Level II and is based on the academic degree at Master’s level of a university in one or two subjects. In addition, two semesters of vocational training at the school for teacher education at FHNW have to be completed. The diploma does not require a Master's degree in a second subject; however, it is advisable due to better career options later after graduation. Details are to be found in UNI INFO «Lehrdiplom für Maturitätsschulen».

Also see: [www.fhnw.ch/ph > Studium > Diplom Sekundarstufe II](www.fhnw.ch/ph > Studium > Diplom Sekundarstufe II)

**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 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

Master studies

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, Veterinary and Dental Medicine, Pharmaceutical Sciences, Nursing Sciences, Life Sciences, Applied Biomedical Sciences, Agricultural Sciences, Forestry, Food Sciences, Sports Science, Biochemistry, Psychology, Economics, Sociology or Geography, Environmental Sciences; all Bachelor with a minimum average degree of 5.0 and basic knowledge in a) Biology (min. 2 CP) and b) Mathematics or Biostatistics of at least 2 CP.

Students with a BSc in a different branch will be assessed individually.

For students with a relevant BSc degree but an insufficient mark, the student can alternatively pass the GRE test in the area of “Quantitative Reasoning” provided the result is 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 guidelines for the master’s degree program Epidemiology: www.bio.unibas.ch

Binding information under: http://www.unibas.ch/admission

Application

Application under http://www.unibas.ch/application; the application fee amounts to CHF 100.-. Application deadline for the fall semester is April 30.

Students of the University of Basel see: https://www.unibas.ch/de/Studium/Im-Studium/Rueckmelden/Masterstudium.html. The application deadline for Basel students is published there.

Enrollment

The letter of admission 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

Per semester:

Tuition fees (also for examination semesters) CHF 850.-

Individual costs of living etc. are not included.

A laptop computer is required for a successful completion of the courses.

Scholarships and student loans

Applications have to be sent to the responsible office of the canton in which the parents are eligible to pay tax. 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**

- Ordnung für die Bachelor- und Masterstudiengänge an der Philosophisch-Naturwissenschaftlichen Fakultät der Universität Basel vom 05.12.2015
- Merkblatt zur Erlangung der fachwissenschaftlichen Anerkennung für das Lehrdiplom für Maturitätsschulen in Biologie (Lehrpersonen für die Sekundarstufe II) von Mai 2016
  [www.bio.unibas.ch/reglemente/](http://www.bio.unibas.ch/reglemente/)

**Information about the University of Basel**

- The course directory can be found under:
- A new edition of the “Basler Studienführer” was published in 2016:
  [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

Student Administration
Swiss Tropical and Public Health Institute
Mrs. Christine Mensch, Socinstrasse 57, 4002 Basel, Tel.: +41 (0)61 284 82 89
www.swisstph.ch
e-mail: christine.mensch@unibas.ch

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