

# DRUG SCIENCES

## Master's degree program

Master of Science: MSc Drug Sciences

The Master of Science Drug Sciences provides theoretical and practical skills in the field of the discovery, development and safety aspects of drugs. This Master program is focused on a future career in industrial or academic research, product development or in a regulatory agency.

### Focal area of teaching and research

The Department of Pharmaceutical Sciences and its associates offer a comprehensive Master course for students with a Bachelor degree in pharmaceutical sciences. Students with a Bachelor in a related field within the natural or medical sciences are also encouraged to apply (see chapter «Admission»). This course provides basic knowledge focusing on pharmacology and toxicology as well as on the drug discovery and development process. The curriculum was developed by a collaboration of the Faculty of Pharmaceutical Sciences at the University of Basel in close collaboration with scientists from the Department Biomedicine, the Basel-based life science industry, the Swiss Centre for Applied Human Toxicology and regulatory authorities.

### Course structure master studies

The Master of Science degree requires a successfully completed Bachelor's program. The MSc Drug Sciences awards 120 ECTS credits in total. The course comprises lectures, seminars, a practical training, as well as a ten months supervised Master's thesis work. Elective courses complement the program in order to promote individual skills.

<b>Curriculum Master's Degree in Drug Sciences</b>	<b>KP</b>
Introduction and Basis of Human Diseases	9
General Skills and Experimental Tools	6
Target Identification/Validation to Discovery of Modulators	8
Translating Pharmacology and Drug Safety to Humans	12
Clinical Drug Development: the Basis for Market Approval	8
Practical Training	8
Master's thesis (10 months)	50
Master's examination	4
Elective subjects	15
<b>Total</b>	<b>120</b>

One ECTS credit point roughly equals 30 hours of study.

## Course language

The language of instruction is 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.

## 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. The Master's degree program Drug Sciences does include an elective subject; however, no other subjects are required.

## Start of program

The program is to be started in fall semester.

## Duration of study

The Master's program lasts four semesters. There are no restrictions on the duration of study.

## Further degrees

**Doctorate:** The Master in Drug Sciences qualifies for a doctorate at the Graduate School of Natural Sciences. In some cases the acceptance is associated with additional requirements. At the Department of Pharmaceutical Sciences the graduates are eligible for a doctorate in pharmaceutical sciences or toxicology without additional requirements. Transfaculty doctorates are possible in the fields of epidemiology, history of the sciences, medical-biological research and pharmacology. The doctoral studies last three to four years. After the acceptance of the dissertation an oral examination covering the postgraduate studies in the doctoral subject has to be passed.

**European Registered Toxicologist:** Additional elective courses offered as part of the MSc Drug Sciences provide the theoretical basis for subsequent registration as a professional toxicologist. In addition to the theoretical basis, five years of professional experience are required to apply for inclusion in the professional register (see [www.swisstox.ch/swisstox-de/register/reglement.php](http://www.swisstox.ch/swisstox-de/register/reglement.php)).

## Career opportunities

With the qualification of the MSc Drug Sciences, and potentially a subsequent doctorate, you acquire an excellent foundation for a position in industrial or academic research, product development or in a regulatory agency.

## Admission

To be admitted directly, you must have completed a Bachelor degree in Pharmaceutical Sciences from a Swiss University. Holders of a Bachelor degree from a Swiss University can be admitted with conditions provided that at least 120 credit points have been documented in one or more of the following fields of study: Biology, Biochemistry, Chemistry, Human Medicine, Veterinary Medicine, Pharmaceutical Sciences and provided that not more than 60 credit points of core competencies out of the Bachelor of Sciences of Pharmaceutical Sciences are missing. Holders of a Bachelor degree in the before-mentioned fields of study from a recognized foreign University may apply and the Teaching Commission shall examine the equivalence with the corresponding qualifications/prerequisites.

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 30.

## 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

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

Individual costs of living etc. are not included. Costs for excursions and visits of other labs will have to be covered by the students.

**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.

## 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 Drug Sciences see [www.pharma.unibas.ch/de/education/msc-drug-sciences/](http://www.pharma.unibas.ch/de/education/msc-drug-sciences/)

## 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 Drug Sciences can be discussed with the Coordination of the Department of Pharmaceutical Sciences (at Pharmacenter, [studienkoordination-pharma@unibas.ch](mailto:studienkoordination-pharma@unibas.ch), T +41 61 207 15 53) or with the Program Director: Prof. Alex Odermatt (at Pharmacenter, [alex.odermatt@unibas.ch](mailto:alex.odermatt@unibas.ch) T +41 61 207 15 30).

## Adressen

### **Departement Pharmazeutische Wissenschaften**

Studienkoordination im Pharmazentrum

Klingelbergstrasse 50, 4056 Basel, T +41 61 207 15 53

[www.pharma.unibas.ch/de/home/](http://www.pharma.unibas.ch/de/home/)

e-Mail: Studienkoordination-Pharma@unibas.ch

### **Dean's Office of the Faculty of Science**

Klingelbergstrasse 50, 4056 Basel

T +41 61 207 30 53

[www.philnat.unibas.ch/](http://www.philnat.unibas.ch/)

e-mail: studiendekanat-philnat@unibas.ch

### **Student Administration Office of the University of Basel**

Petersplatz 1, 4001 Basel

T +41 61 207 30 23

[www.unibas.ch](http://www.unibas.ch)

enquiries: [www.unibas.ch/studseksupportEN](http://www.unibas.ch/studseksupportEN)

### **Student Advice Center Basel**

Steinengraben 5, 4051 Basel

T +41 61 207 29 29/30

[www.studienberatung.unibas.ch](http://www.studienberatung.unibas.ch)

e-mail: studienberatung@unibas.ch

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