

| le savoir vivant |

Master of Science (MSc) in Molecular Life Sciences
specialisation in

Microbiology



Unil

UNIL | Université de Lausanne

Faculté de biologie
et de médecine

www.unil.ch/ecoledebiologie/en

OBJECTIVES/ASSETS

Microbiology is a fascinating area of science, with many different aspects enabling excellent career prospects.

The objectives of the Microbiology specialisation are:

- To mobilise in-depth knowledge in a wide range of advanced topics in microbial sciences, covering aspects of plant and environmental microbiology, microbial ecology, biotechnology, synthetic biology, cell microbiology, virology, microbial pathogenesis, bacteriology, fungal biology, yeast models, epidemiology and (clinical) diagnostics.
- To plan and carry out personal research in microbial sciences.
- To be prepared for careers in areas related to microbial sciences, such as diagnostics, biotechnology, academic or industry research, clinical microbiology, environmental management, administration, teaching, public outreach, scientific journalism and research management.

CONTENT

- Two common courses with other Molecular Life Sciences students: «Sequence a Genome», a unique hands-on course on genome sequencing of microbial communities, and a course on writing a scientific review and a research proposal.
- A wide range of optional courses, covering major areas in modern microbiology.
- A personalised curriculum assembled using additional courses from other Master's programmes, under the condition that sufficient credits are chosen among microbiology courses.
- A First step project in any area of the Master's programme.
- A Master research project on a topic in microbiology.

MANDATORY COURSES

- Sequence a Genome
- Write a Review
- Write a Fellowship

PROJECTS

- First step research project
- Master research project in the field of microbiology

OPTIONAL COURSES

- Large choice of courses in microbiology and other areas of biology

GENERAL INFORMATION

The Master of Science (MSc) in Molecular Life Sciences (MLS) amounts to 120 ECTS and is taught entirely in English. MLS students may obtain the Master without specialisation, or with a specialisation in Microbiology or Bioinformatics.

ADMISSION REQUIREMENTS

Candidates for the Master MLS must hold a Bachelor of Science (BSc) from a Swiss university in Biology or in a field considered to be equivalent. Other degrees awarded by a foreign university may be considered equivalent and grant access to the programme with or without further conditions.

CONDITIONS FOR OBTAINING THE QUALIFICATIONS OF MASTER'S DEGREE WITH SPECIALISATION

www.unil.ch/eb-mls > Study programme > Regulations

To obtain the Microbiology specialisation, you must choose and complete your Master research project within the field of the specialisation.

To be awarded the Master's degree with a specialisation, you must communicate your choice to the School of Biology when enrolling for your personal Master research project.

DIRECTOR OF THE PROGRAMME

Prof. Richard Benton

RESPONSIBLE FOR THE SPECIALISATION

Prof. Yolanda Schaerli

FURTHER INFORMATION

www.unil.ch/eb-mls > Specialisations > Microbiology