

CURRICULUM

Sem.	Study area Fundamentals	Study area Consolidation	Study area Subsidiary fields
1		Immunology (6 CP)	Laboratory Rotations (3 CP)
	Introduction to Infectious Diseases (6 CP)		Introduction to Scientific Literature (3 CP)
	Introduction to Infectious Diseases Epidemiology and Control (6 CP)		Current topics in infectious diseases (6 CP)
2	Tutorial: Molecular and Cellular Biology (3 CP)	Virology (6 CP)	Mathematical Modelling and Statistics (6 CP)
		Parasitology (6 CP)	Laboratory Rotations (3 CP)
		Microbiology (6 CP)	
3		Emerging Viral Diseases & One Health (6 CP)	Laboratory Rotations (3 CP)
		Principles of Pathogen Genomics (6 CP)	Study Design, Analysis and Research Ethics (6 CP)
		Medical Entomology (6 CP)	Effective Scientific Writing (3 CP)
4	Master's Thesis (30 CP)		

The Master's program Infection Biology and Control runs for two years (four semesters) and encompasses a total of 120 ECTS (European Credit Transfer and Accumulation System) points.

Keywords

M.Sc. Infection Biology and Control; Infectious diseases; One Health research; Infection Biology

IBC@TÜBINGEN & LAMBARÉNÉ

The international Master's Program in Infection Biology and Control is offered by the Faculty of Medicine at the University of Tübingen. The 2-year course is coordinated by the Institute of Tropical Medicine, which is a well-established institution in the area of infectious diseases research.

University of Tübingen

Innovative. Interdisciplinary. International. These have been our guiding principles in research and teaching from the very beginning. Founded in 1477, Tübingen is one of Europe's oldest, most respected institutions of higher education. Tübingen's success in the German Government's Excellence Programs since 2012 have placed it among the most outstanding universities in Germany. The University is also well-placed in international education rankings.

CERMEL Lambaréné

The Centre de Recherches Médicales de Lambaréné (CERMEL) is an independent research institution in Lambaréné, Gabon. The center focuses on research into malaria, multi-resistant tuberculosis and worm infections. CERMEL maintains close ties with academic institutions all over the world, including the Institute for Tropical Medicine at the University of Tübingen, the Medical University of Vienna and the University of Amsterdam.

Find out more about the Master's program in Infection Biology and Control by scanning this QR-Code:



Universitätsklinikum
Tübingen

University of Tübingen · Faculty of Medicine

Program Director: Prof. Dr. Steffen Borrmann

Program Coordinator: Theresa Kahl

Geissweg 5/1 · 72076 Tübingen · Phone: +49 7071 29-73602

ibc.studium@med.uni-tuebingen

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



INFECTION BIOLOGY AND CONTROL

Master of Science



FIELD OF STUDY

Infection Biology aims to characterize the interaction between pathogens and their hosts in order to understand the mechanisms by which parasites, bacteria, viruses and fungi establish infections and cause disease.

Infectious diseases continue to exert an unacceptably high burden of disease, especially in Sub-Saharan Africa. Understanding how pathogens establish and maintain infections and frequently cause debilitating and life-threatening disease is an important step towards developing improved strategies for control and eventually, elimination.

The Master's program in Infection Biology and Control (IBC) focuses on the predominant causes of infectious diseases in sub-Saharan African countries, e.g., major parasitic pathogens and emerging and re-emerging viruses with an added emphasis on translational aspects of infectious disease control in the Central African context. The aim of this program is to equip students with the knowledge and skills in various disciplines, including parasitology, microbiology, virology, entomology, epidemiology and statistics, immunology, clinical trial design and communication of research findings. An important aspect of the IBC MSc program is the research-practice oriented teaching and training, for instance, via 2-week laboratory rotations in ongoing international projects at the CERMEL, ranging from applied cell biology and immunology to phase I-IV clinical trials.



OPTIONS FOR GRADUATES



A Master's Degree in Infection Biology and Control opens future career options at:

- National and international disease control programs (e.g., Africa CDC, WHO)
- Pharmaceutical companies (e.g., as microbiology scientists)
- Universities and research institutes (e.g., as a lecturer, researcher)
- Non-governmental organizations (e.g., GAVI, CARE, MSF).

The program also provides a solid foundation for PhD studies.

How to apply

Applications are accepted online.

For the latest information, please refer to this website at the University of Tübingen:

<https://uni-tuebingen.de/en/4204>

Photo credits: University of Tübingen
Edited: February 2024

REQUIREMENTS

The MSc program Infection Biology and Control offers 20 places every two years. Its inaugural semester was the winter semester 2023/24. The study program is open to non-EU citizens only. Eligible students can receive a monthly scholarship from the DAAD.

It will take place entirely at the campus of the Centre de Recherches Médicales de Lambaréné (CERMEL) in Gabon. Students entering the Master's program Infection Biology and Control must meet the following admission requirements:

- A certificate of at least a six-semester undergraduate degree in biology or an equivalent degree in a comparable subject
- English language proficiency of B2 level CEFR (Common European Framework of Reference for Languages)
- Proof of French language proficiency of level A2 CEFR (DELFB2)

Admission Process

Study places will be awarded based on the applicants' qualifications and experiences, as well as their performance in a selection interview.

Selection criteria

For the establishment of a ranking list, the overall grade of each applicant's professional qualification will be taken into account, along with evidence of relevant achievements and knowledge and the applicant's motivation for the degree program. This can include plans for subsequent professional activities in Central African or, if applicable, also West African institutions/organizations.

Start of studies/courses: Winter semester
Regular duration of study: 4 semesters
Total credits: 120 ECTS
Language of instruction: English