Molecular Medicine @ Tübingen

The interdisciplinary BACHELOR PLUS Program Molecular Medicine is offered by the Faculty of Medicine and the Faculty of Science. Courses in academic and computational skills are provided by the Competence Centre for University Teaching in Medicine, the Career Service and the “Zentrum für Datenverarbeitung”. We want to thank all our associated partners for their contribution.

The 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 higher education rankings.

With its wide spectrum of subjects, the University of Tübingen offers many opportunities for learning and for teaching – often in interdisciplinary programs which draw on a number of different subjects. Internationally, we have a large number of student exchange options with partners around the globe. Excellent research at the University of Tübingen goes hand-in-hand with the latest teaching methods to provide the best possible foundation for studies for students from Germany and around the world. This attractive learning environment is further enriched by a large variety of cultural and sporting activities.

Course Syllabus (excerpt)

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BMZ and MM: Biomolecules and Cells and Molecular Medicine

The single modules of the course cover a wide thematic and methodical range. Within the first two semesters, the students will gain fundamental scientific knowledge in the subjects of chemistry, medical physics, physical chemistry, mathematics and molecular biology. Based on that knowledge, microbiology, cell biology, virology and immunology will form the main focus from the 3rd semester onwards. Progressive medical subjects will be taught in semesters 7 and 8, including for example hematology, neurobiology and pharmacology. Furthermore, students can choose from a catalog of electives to deepen their knowledge in selected areas of specialization.

In semesters 5 and 6 the curriculum requires a one-year stay abroad. The stay abroad can be used for studies, an internship or a combination of both.

Edited: October 2019
Field of Study

The innovative BACHELOR PLUS program in Molecular Medicine is characterized by interdisciplinarity, practice orientation and internationality with the ambition to qualify future excellent scientists for the medical research.

Tübingen’s program in Molecular Medicine is an excellent choice for students seeking a solid academic training in the natural sciences and in medical topics. It offers an alternative to the more traditional study of medicine, which concentrates on preparing the students for a career in clinical practice. Research, particularly in the fields of molecular biology and cell biology, has had an enormous impact on the field of healthcare and it will remain indispensable for future improvements in diagnostics and therapy. The study of Molecular Medicine familiarizes students with the latest research findings in Molecular Medicine and with a broad spectrum of other cutting-edge topics. At the same time, it offers comprehensive practical training in the methods and techniques employed in the field of molecular biology.

ECTS
Our curriculum complies with the European Credit Transfer System (ECTS) to ensure compatibility with other international programs. The bachelor’s program lasts four academic years (eight semesters) and encompasses a total of 240 ECTS credit points.

Flexibility Window – Study Abroad
In semesters 5 and 6 the curriculum comprises an obligatory stay abroad. This year offers the students the chance for intercultural communication. It also provides them with room to broaden their knowledge of the subject and with the opportunity for interdisciplinary qualifications, studies of cutting-edge topics and studies outside the subject area. The stay abroad can be used for studies at a foreign university, an internship or a combination of both.

Keywords: Molecular Medicine, Molecular Biology
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Start of studies/course is each winter semester
Standard duration of program: 8 semesters
(in accordance with PO from 11.5.2017)
Total amount: 240 ECTS-Credit Points including 60 ECTS for study abroad
Study year abroad: obligatory during the 3rd year
Course language: German

Requirements

General requirements
The basic requirement for a successful degree is, in general, a great interest in scientific contexts and high motivation. Basic knowledge in chemistry, biology and mathematics, notably at the beginning of the courses, facilitate successful progress.

First year students must be proficient in written and spoken German language and must be able to express rationales clearly.

Foreign language competence
Since English has become the international technical terminology and since a large amount of the literature is published in English only, good knowledge of the English language is additionally necessary.

Application Procedure

German and EU Applicants will need a ‘Allgemeine Hochschulzugangs­berechtigung (HZB)’ which conforms to a general qualification for university entrance. Foreign certificates should be recognised by the competent public authority as comparable. Students whose first language is not German should provide a certificate of proficiency in the German language (DSH, or Test DaF, respectively).

All other foreign applicants should contact directly:
University of Tübingen · Department IV – Student Affairs · Section 4 – Advising and Admission of International Students
Nauklerstr. 2, 72074 Tübingen
Contact: https://uni-tuebingen.de/en/8935

The program can only be commenced at the beginning of the winter term in autumn (winter semester).

Perspectives

Degrees and Career Opportunities
The Bachelor of Science program in Molecular Medicine lasts four academic years and leads to a Bachelor of Science (B.Sc.) degree. Upon successful completion of the program, graduates may choose to continue their studies in our consecutive Master’s program in Molecular Medicine that lasts one academic year (two semesters) or may directly pursue a doctorate.

Alternatively graduates may start a professional life:
• in scientific research (e.g. at universities or other research facilities)
• in the industry (e.g. biomedical technology, production and quality inspection)
• in fundamental research and development, publication and publishing sector, marketing, administration
• in private laboratories (e.g. Molecular Diagnostics and Analytics)
• in clinics (e.g. molecular and biochemical diagnostics, clinical research)
• in other institutions (e.g. ministries, institutions for the promotion of research, institutions for the transfer of technology)

Application deadline: 15th July
Online application portal: https://uni-tuebingen.de/index.php?id=37885