OVERVIEW

Degree
- Master of Science (M.Sc.)

Duration of studies
- 3 semesters

Start
- October (winter semester)

Admission prerequisites
- Completed B.Sc. or 1st state examination in natural sciences, pharmaceutics, medicine or informatics
- Level C1 English language skills
- Level A2 German language skills

Course language
- English

Fee
- No tuition fees
- Student service fee of € 52 per semester

APPLICATION

Application period
- 15 April - 15 July

Online application
- in the Primuss-Portal at www.th-deg.de/bewerbung

Notice of acceptance oder denial
- in the Primuss-Portal until beginning of February

Enrolment
- you will find information on this in the admission notice

Late placement for open spaces
- via waiting list

Prep courses
- September www.th-deg.de/prep-courses (no obligation)

Semester start
- 01 October

CONTACT

Are you interested in this Life Science Informatics master degree and would like to find out more?

Enquiries about the course
lsi-info@th-deg.de
www.th-deg.de/lsi-m-en

General enquiries about studying at DIT
welcome@th-deg.de
www.th-deg.de/en/study-with-us/info-for-internationals
This postgraduate degree is an interdisciplinary subject area connecting biomedical aspects with computational analysis expertise, using tools able to handle and interpret the flood of data created by the Next Generation Sequencing technology. Students learn how to digitally process and correlate data that is generated by the sequencing of human, animal or plant genetic material, in order to make it usable.

This understanding of human genome through Next Generation Sequencing technology will qualify Life Science Informatics graduates to later work at the exciting forefront of medical technology; for example in break-through innovations such as disease prevention, monitoring and treatment.

**COURSE CONTENT**

Biomedical research currently makes use of various computer-based analyses to identify and analyse genes that are predictive for the prognosis or therapeutic response of a disease (personalised medicine and molecular diagnostics).

The analysis and evaluation of these data sets requires knowledge of both, medical/ scientific basics in combination with application-oriented computer science knowledge.

These skills are taught in an application-oriented manner within the Life Science Informatics Master’s programme.

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**COURSE GOALS**

After successfully completing the Master’s degree in Life Science Informatics you will have knowledge about the following bio-informatics analysis concepts:

- Unix command line usage
- Data formats and repositories
- NGS quality control
- Sequence alignments
- Data visualization and interpretation
- Genome variation and SNP calling
- RNA-Seq and gene expression analysis
- ChIP-Seq analysis
- Biomedical Software tool usage

**CAREER PROSPECTS**

The amount of data that is generated during the decoding of human material must be processed and correlated in order to make it usable: This is the task of Life Science Informatics.

Career opportunities are particularly:

- at universities
- in pharmaceutical companies
- in clinical and/or scientific research institutions
- in bioinformatics companies
- in biotech companies
- in the biomedical industry

If you belong to the best, then you have optimal conditions to study for a PhD after the master thesis.