

Information on the master thesis

SoSe 2026 - WiSe 2026/27

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UNIVERSITÄT
TÜBINGEN





- Master: you are in your 3rd or higher semester

- FAQs
 - Master thesis
 - Formal information
 - When to start?
 - How and where to find a topic
 - Supervisor / Review
 - Written thesis
 - Questions?
-

- Final thesis depending on the *examination regulations* (PO) relevant to the student
- Under

<https://uni-tuebingen.de/fakultaeten/mathematisch-naturwissenschaftliche-fakultaet/studium/satzungen/bioinformatikbioinformatics-msc/>

you will find the currently valid examination regulations
» PO 2021

- The final module includes the Master's thesis as a form of assessment.
- „The Master's thesis is meant to demonstrate that the author is able to process a topic in the **relevant subject independently** and by applying academic methods within a set time, and to present the results thus obtained appropriately and in written form.”
- The time allotted for writing the Master's thesis is 6 months
- 2 examiners / reviewers

Scope: 6 Months, 30 (27+3) ECTS



- The Master's examination should be taken by the end of the *fourth* semester, and latest by the end of the seventh semester
- § 11: ...requirements of admission: ...
the successful completion of modules worth a total of at least 45 ECTS credits.

All Degree Programmes:

- The student is to be given the opportunity to make suggestions for a Master's thesis topic; however the examination board is under no obligation to consider such suggestions.
 - The Master's thesis is assessed by two examiners in accordance with § 14, one of them is usually the thesis supervisor;
A member of the University of Tübingen is chosen to be the supervisor of the Master's thesis.
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All Degree Programmes:

- § 14(2) Only professors, academics with habilitation, and other academic staff who have been appointed by the board of examiners in accordance with the respective legal requirements are authorized to conduct examinations.
 - Reviewers: Members of the CS department and/or IBMI
The following expressly applies:
the co-opted professors and honorary professors of the department are among the approved examiners (see website of Department of Computer Science).
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Reviewer = supervisor?



The Master's thesis is assessed by two examiners in accordance with § 14, one of them is usually the thesis supervisor;

What does „supervisor“ mean?

Supervisor according to PO: ensures that the work can be completed within the processing period ..,

Supervisor: mainly doctoral students or PostDocs, that supervise on a „daily“ basis

Main question:



How to get a master thesis topic?

- Take care of a topic “soon”, AND find an examiner (especially if you want to propose your "own" topic or want to write an external thesis).
 - You can find open topics on the websites of the working groups of the IBMI, which you can find here:
<https://uni-tuebingen.de/de/148596>
 - Also at:
Hertie Institute
MPI f. Biology
in the biology , biochemistry, pharmacy departments
 - *Recommendation:* contact working groups directly. Most agree on topics and modalities in person so that they can truly respond to you and your interests.
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- *JunProf. Küstner: Medical Image Analysis*
(<https://www.medizin.uni-tuebingen.de/de/das-klinikum/einrichtungen/kliniken/radiologie/allgemeine-radiologie/forschung/ag-midas/teaching>)
 - *Dr. Kronenberger, Juniorprofessor f. Medizinische Mikrobiologie und Hygiene, two topics:*
 - "Development of drugs against infection diseases using molecular modelling" for someone with interests on Docking, MD simulations and ML-based screening."
 - "Evaluation of enhanced sampling approaches for molecular dynamics simulations" for someone with coding capabilities that would be interested in evaluating some enhanced sampling MDs.
 - *Prof. Nieselt: already fully booked*
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- *Prof. Ziemert*, two topics:
 - “Design, Generation, and Exploration of a Dataset for ML-based prediction of Plastic-Degrading Marine Fungal Enzymes” (Bachelor or Master)
 - “Machine Learning-Based Prediction of Enzyme-Substrate Interactions: application on monooxygenases” (Master)
 - *Prof. Lupas*, MPI, two topics:
 - “Design of new membrane-spanning tubes that incorporate non-canonical amino acids (analogous to Gramicidin and Polytheonamide B)”
 - “Design of folding variants of a de-novo protein, Bsc4, using as few mutations of the native sequence as possible”
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- In principle possible to write a thesis in a company, or in Tübingen at an MPI or other research institute.
- There are some rules:
 - You need a **primary examiner** from the IBMI!! Therefore: find her/him first! Then discuss about form of external thesis
 - There is also a form [1] to be signed which regulates, that you cannot get any „income“ from the company/MPI/...

[1] Unter <https://uni-tuebingen.de/en/74351> Form Boundary conditions for external theses

Thesis topics offer



- After agreeing on a topic, ask supervisor for a brief **description** of the **objectives** and main **milestones** of your thesis.
- Ask to get a seat / desk in the working group

Registration



- The Master's thesis must be registered with the examination office.
- This can be done at *any time* (365 days a year).



Thesis Registration

Subject:

☐ Bioinformatics
 ☐ Computer Science
☐ Cognitive Science
 ☐ Machine Learning
☐ Media Informatics
 ☐ Medical Informatics

Degree:

☐ B.Sc.
 ☐ M.Sc.

Name: _____ First name: _____
 E-Mail: _____@student.uni-tuebingen.de Matr.-No.: _____

Private e-mail for future correspondence (despatching of the certificate, queries about the graduation ceremony): **optional, recommended:** ☐ I have taken note of the data query for the graduation ceremony (see QR code).



Topic: _____

Start date: _____ Submission date: _____

☐ This is an **external thesis**. The signed acknowledgement of the boundary conditions is attached.

Registration and declaration of the student on scientific honesty

I hereby declare that I have read and taken note of the "Guidelines for Ensuring Good Scientific Practice" of the University of Tübingen (see page 3). I declare that I will be the sole author of this thesis, that I will not use any sources or resources other than those indicated and that I will clearly identify all matter from other works, whether cited verbatim or paraphrased, as such. I will confirm this by means of a corresponding declaration signed by hand and enclosed with the thesis (see page 2 for further details). I have read and understood the content of that corresponding declaration and I have consulted my supervisor (if specified in that declaration (e.g., when using generative Artificial Intelligence in the context of my thesis).

Student's signature

Date: _____ Signature: _____

Responsible first examiner (Prof./Priv.-Doz. of the respective degree programme/subject):

Name: _____ E-Mail: _____
☐ printed and bound copy of the thesis requested (please tick if applicable)

Date: _____ Signature: _____

Second examiner (all master's programmes, Prof./Priv.-Doz.)

Name: _____ E-Mail: _____
☐ printed and bound copy of the thesis requested (please tick if applicable)

Date: _____ Signature: _____

Form: Thesis Registration

<https://uni-tuebingen.de/en/74351>

-> "Thesis registration form (PDF)"

And then you need to write it up ...

My thesis is written in



WWW.PHDCOMICS.COM

Written thesis: which language



According to the PO, you have the right to write your thesis in English or German.

When registering, please ensure that the title is linguistically correct.



Written thesis

- Style templates (in LaTeX!) available for written thesis
- Standard cover sheet
- Length: ca. 50-60 pages (note this is not regulated in the PO)
- Citing: make sure you cite consistently, cite all sources incl. URLs, images, figures, etc. that are not from you or adapted by you.

<https://uni-tuebingen.de/de/140699>

tionen für ▾

Schnellzugriff ▾

HLUSSARBEITEN ▾

e Transkriptomik > [Abschlussarbeiten](#)

Latex Templates

Bachelor 🇩🇪 [Deutsch](#) / 🇬🇧 [Englisch](#)

Master 🇩🇪 [Deutsch](#) / 🇬🇧 [Englisch](#)



Written Thesis: a recommendation

The University offers *Writing Consultation* :

<https://uni-tuebingen.de/en/study/organizing-your-studies/progressing-successfully-through-your-studies/the-diversity-oriented-writing-center/for-students-and-doctoral-candidates/writing-consultations/>

LLMs during project and in written thesis



The increasing importance of generative AI and LLMs

One thing is clear:

- The use of generative AI can be very helpful.
- The use of generative AI can be extremely problematic in terms of incorrect content, violations of data protection law, copyright law and scientific misconduct (plagiarism).

My tip: Consult with your supervisor.

PO 2021:

prepare 2 (bound - see registration) copies for reviewers
+ pdf (per EMAIL to pruefungsamt.bioinformatik@uni-tuebingen.de and/or
pruefungsamt.medizininformatik@uni-tuebingen.de)
and submit the completed thesis to the examination office
together with declaration for thesis (see next slide)

Depending on the topic, the code you
generate will also be included in the
assignment and thus in the assessment
(submission e.g. via GitHub).

Declaration

According to resolutions of the Boards of Examiners for Bioinformatics, Computer Science, Computer Science Teaching Degrees, Cognitive Science, Machine Learning, Media Informatics and Medical Informatics of the University of Tübingen dated 05.02.2025. Valid for final theses (B.Sc./M.Sc./B.Ed./M.Ed.) in the corresponding subjects. In the case of student research projects and term papers, please do so in accordance with the respective examiner.

1. General declarations

I hereby declare that:

- I have written this thesis independently and I have not used any sources or resources other than those specified.
- I have clearly identified as such all matter from other works, whether cited verbatim or paraphrased.
- The thesis was not the subject of any other examination procedure neither in its entirety nor in significant parts.
- In case I submitted an electronic file and one or more printed and bound copies (e.g. because the examiner(s) requested this): The electronically submitted file is identical to the printed and bound copy(s) I submitted.

2. Declaration concerning publications

A publication is often a sign of quality (e.g. publication in a scientific journal, a conference, preprint, etc.). However, it must be stated correctly. Please tick the box that applies to your work:

- ☐ The work/thesis has not yet been published in full or in part.
- ☐ The work/thesis has been published in part or in full. A complete table with bibliographic details can be found in the appendix.

Declaration for thesis

3. Using methods of artificial intelligence (AI, e.g. ChatGPT, DeepL, etc.)

Using AI can be useful. However, such usage must be declared correctly and can influence the focus of the evaluation of the thesis. Please tick all variants that are applicable to your thesis and please note that variants 3.4 – 3.6 require prior consultation with the supervisor:

- ☐ 3.1. No usage: I did not use AI to create my thesis.
- ☐ 3.2. Spelling & grammar correction: I used AI for correcting spelling and grammar without any relevant text generation or translations, i.e., I have had texts written by me corrected in the same language. These are purely linguistic corrections so that the meaning I originally intended has not been changed or expanded significantly. In case of doubt, I discussed this with my supervisor. All programmes used and their version numbers are listed in a table in the appendix of my thesis.
- ☐ 3.3. Support with developing software: I used AI to help me write code in software development. This is merely used as an aid and not to automatically generate larger programme parts. In case of doubt, I discussed this with my supervisor. All programmes used and their version numbers are listed in a table in the appendix of my thesis.

- ☐ 3.4. Translation: I used AI for translating texts I had written in a different language *by prior consultation and with the permission of my supervisor*. Each such translation has been labelled in the running text and the appendix of my work contains a table with a complete list of translated text passages and the programmes used with version number.
- ☐ 3.5. Code generation: I used AI for generating code in software development *by prior consultation and with the permission of my supervisor*. The appendix of my thesis contains a table with a complete record of all such uses, the programmes used with version numbers and the prompts used.
- ☐ 3.6. Text generation: I used AI for generating text in my work *by prior consultation and with the permission of my supervisor*. Each such usage of AI has been labelled in the running text and the appendix of my work contains a table with a complete record of all such uses, the programmes used with version number and the prompts used.

In case I have used AI in any form (see above), then I declare:

I am aware that I am responsible if the use of AI results in incorrect content, violations of data protection law, copyright law or scientific misconduct (e.g. plagiarism).

Oral colloquium



- In addition to the Master's thesis, an oral final examination at the end of the Master's program (a final colloquium on the Master's thesis) is required

Presentation = Oral Exam



- The presentation is approximately 25-30 minutes long (similar to seminar talks).
 - Usually as part of a group seminar (at least the primary reviewer and supervisor are present, often the entire working group plus students plus guests)
 - Time/date for presentation in consultation with supervisor (can take place before or after submission of thesis)
 - PO 2021: oral exam will be ‘graded’ separately.
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- Examination office Bioinformatics and Medical Informatics:
Susanne Mischorr, Wilhelmstr. 19
- Chair of the Examination Board
 - Bioinformatics: Prof. D. Huson
 - Medical Informatics: Prof. N. Pfeifer

Any further concrete questions?

You can always either contact me
kay.nieselt@uni-tuebingen.de

or

Dr. Markus Zimmermann
Programme coordinator
m.zimmermann@uni-tuebingen.de
