

Handout on Theses and Dissertations

As a result of the close cooperation between the Technical University of Munich (TUM) and industry, the commendable desire of industry to contribute to the scientific training of students and doctoral candidates, and the motivation that students and doctoral candidates gain from working on scientific problems either arising from or applied to a practical environment, a large number of *Diplom*, bachelor's and master's theses (hereinafter "thesis"/"theses") and dissertations are assigned at TUM, whose topics have been proposed by industry and/or have been developed in industrial companies on the basis of company-specific tasks and data.

The assignment, supervision, and preparation of these scholarly projects raises a number of legal and administrative questions that are of importance to all parties involved.

I. General Legal Basis

1. What needs to be considered for theses?

The thesis is a university examination. It is a module and part of the final examination of the degree program. For a thesis to be acknowledged as an examination, it must strictly comply with the requirements for theses set out in the program-specific Academic and Examination Regulations (*FPSO*) and the Bavarian Higher Education Innovation Act (*BayHIG*). In particular, this includes the following:

- According to § 18(4) Sentence 3 of the General Academic and Examination Regulations for Bachelor's and Master's Programs at the Technical University of Munich (*APSO*), the consent of the chairperson of the Examination Board is required if the thesis is to be written at an institution other than the university. In such a case, the thesis must also be supervised by a TUM examiner. Students/candidates may propose topics, however, university educators are under no obligation to accept proposed topics. As a rule, finding a topic is not part of the examination requirement within the thesis module. Accordingly, only the TUM examiner may have rights to the topic or the assignment, but not the student or the industrial company.
- The university educator holds the sole competence and responsibility for determining the precise topic of the thesis, as well as for the entire formal process of this part of the final examination. Good collaboration between university educators, the industrial companies and their on-site supervisors is essential here.
- Neither an industrial company nor any other person or institution outside the university may be granted the right to exert any influence on the topic or content of a thesis during its completion. Any proposals and initiatives to this effect will be considered non-committal in terms of examination law for both university educators and candidates. Completion of the thesis must be feasible within the time limit stipulated in the applicable *FPSO*.
- According to the *APSO*, only students have the right to inspect the examination documents in connection with the grading of the thesis (expert opinions, notes, comments, etc.). The industrial company may neither influence the grading nor inspect the examination documents.

- For justified reasons of competition and market policy, industrial companies require students writing their theses at the company's premises to keep any internal and company-specific data confidential. Students may comply with such confidentiality obligations provided that they are able to work on their topic without restrictions and comply with examination requirements, i.e., that they may complete their thesis as a university examination in a timely manner and submit it as required at TUM.
- If the thesis is to use confidential information belonging to the TUM Chair, a non-disclosure agreement (*GHV*) between the Chair and the student may be considered in individual cases when the topic is assigned, provided that the student is informed thereof when the topic is assigned and that he/she also has the option to choose other topics for the thesis which do not require a *GHV*.

2. What needs to be considered for dissertations?

Dissertations are also university examinations. When writing a dissertation, students must comply with the requirements set out in the Regulations for the Awarding of Doctoral Degrees (*PromO*) and the Bavarian Higher Education Innovation Act (*BayHIG*).

As a rule, the considerations for theses described above apply accordingly to dissertations. As set out in the *PromO*, the dissertation must deal with an academic field represented by a university educator at TUM.

Unlike theses, dissertations are not subject to a time limit for completion. In addition, after completion of the oral examination, doctoral candidates are required by examination law to make the authorized version of the dissertation available to the scholarly public within a one-year period. An industrial company may neither prohibit such publication nor work towards redaction of certain parts. At the request of the doctoral candidate, this one-year period may be extended by one year by the head of the degree-awarding institution, in particular for reasons of confidentiality. This can be implemented by submitting a hold request to the University Library.

II. Questions Regarding the Supervision of Theses

The supervision of theses is an essential task of the university and part of the professional duties of professors appointed by the university.

1. For this reason, supervisors of theses/dissertations are not permitted to:
 - conduct the supervision within the scope of outside professional activity or
 - demand, accept, or accept a promise of remuneration for their own or the university's benefit.
2. For the assignment and supervision of theses/dissertations, supervisors may consider accepting remuneration from industrial companies only if they, completely independent from the supervision, provide services of their own and the remuneration for such services cannot be considered (subsequent) compensation for the supervision. This may be the case where, for example:

- Company-specific data and facts are evaluated and assessed by university educators or academic staff members of TUM at the explicit, documented request of the industrial company;
- Use or exploitation of equipment, software and/or know-how of the Chair/Institute is necessary for the use of the results developed in the course of the thesis/dissertation;
- The external provision of services causes additional time and expenses (additional travel expenses incurred for visits to the industrial company, costs of attending conferences, purchase of special literature, etc.).

Research projects funded by public or private funds or research and development projects with industrial companies for which the employment of students and/or doctoral candidates at TUM is financed by these funds are an exception. As part of these projects, final theses/dissertations may be written.

What these cases have in common is that the funding/remuneration is intended for the conducting of research and/or the services and results provided by members of the university and not for the supervision of the thesis/dissertation.

3. In light of the general legal parameters described thus far, the following principles apply:

- Any person supervising theses/dissertations should only accept proposals for topics that can be supervised within the scope of his/her specific field of expertise, i.e., within the scope of their statutory duties, and for which the Chair/Institute concerned will not be required to provide resources in excess of the standard time and effort necessary for the supervision of a thesis/dissertation. When assessing an external thesis/dissertation, only its scholarly quality is being evaluated, not the company-specific data used in the thesis. The member of TUM is therefore not providing consultancy services that require remuneration.

It is recommended that these principles be communicated early enough, so that the refusal of a topic proposed for an external thesis/dissertation not complying with said principles is transparent and reasonable. When the topic for an external thesis or dissertation is formally assigned, both the student/doctoral candidate and the industrial company should be explicitly informed of the criteria for supervision and grading theses/dissertations.

- In all other cases, the terms and conditions for a collaboration beyond the supervision of the thesis/dissertation must be set out in an agreement between TUM and the industrial company.

When entering into such agreements, the following principles must be observed:

- Parties to the agreement shall be TUM and the industrial company.
- The agreement must include the requirements set out here in Section I.
- The agreement must specify the services to be provided to the industrial company and

the remuneration to be paid to TUM.

The amount of the remuneration will depend on the extent to which TUM facilities, know-how of the Chair/Institute, and Chair/Institute-specific software are employed, as well as the time and effort required for the assessment of the company-specific data and facts on which the thesis/dissertation is based.

In compliance with the Framework for State Aid for Research and Development and Innovation, the remuneration payable to TUM must be calculated on the basis of market prices or market conditions. Documentation of the corresponding calculation must be provided. Until further notice, the simplified cost accounting scheme (*Vereinfachtes Verfahren einer Auftragskalkulation*) whose use is mandatory in order to comply with the requirements of the Bavarian State Ministry of Science and the Arts is to be used. The simplified cost accounting scheme is available at the following link in the TUM Services Directory: <https://portal.mytum.de/kompass/forschung/EU-Gemeinschaftsrahmen>. (German only)

Remuneration for the supervision of theses/dissertations must not be part of the agreement.

- These agreements must not give the impression that they were entered into for the purpose of supervising a thesis/dissertation and that remuneration is being paid for supervision. This is indispensable as a protective measure for our supervising university educators and the only way to ensure that there are no grounds for suspicion of a potential criminal offense under §§ 331 et seq. of the German Criminal Code (*StGB*) (taking or giving bribes, etc.).

The TUM sample contracts should be used as a template for these agreements.

III. Questions Regarding Copyright and Protection of Inventions

1. Who is the author of the thesis/dissertation?

According to § 7 of the German Copyright Act (*UrhG*), the creator of the work is its author. Therefore, as the creators of their theses/dissertations, students/doctoral candidates are the authors. The idea or topic of the thesis alone is not protected by copyright, unless the idea can be identified and defined clearly and distinctly.

In the case of theses, finding a topic is generally not part of the final work.

The copyright to any preliminary work on which the thesis/dissertation is based remains with its author(s). Where necessary, this should be documented in writing.

2. Is there co-authorship?

Any **co-authorship** claims by the supervisor **shall be excluded** as a result of the requirement for each student/doctoral candidate to work independently on the topic of the thesis/dissertation as specified in the *APSO* and the *PromO*. Any contributions in the form of suggestions/ideas will therefore not affect copyright ownership and will by no means create

co-authorship rights. In addition, any supervisory activity that would qualify as a relevant contribution in terms of copyright is not consistent with the nature of a thesis/dissertation as an examination.

3. What is protected by copyright?

Protected by copyright is the concrete form of the work, i.e. the theses/dissertations as linguistic works as such, as well as their scientific presentation in tables, graphs, designs, etc.

However, the scientific findings and theories developed as part of a thesis/dissertation are not subject to copyright protection. Where these findings or theories are used in other academic work, it is essential to correctly cite their source in compliance with good scientific practice. This also applies to unpublished academic works.

4. Who holds the rights of exploitation and/or use?

Rights of exploitation and use of theses/dissertations belong exclusively to the students/doctoral candidates as authors of the works. TUM or third parties may acquire rights only if granted by the authors. The authors are not obligated to grant rights of exploitation or use.

Students or doctoral candidates may neither offer any rights nor be asked to grant them prior to the examination process. This shall not affect rights of exploitation and use that arise in the context of an employment relationship with TUM and in fulfillment of the related duties.

In accordance with the statutory examination regulations, TUM is entitled to the original of the thesis/dissertation. However, this entitlement only extends to the **tangible ownership rights to the work** as such (e.g., to the model, plans, paper, etc.) and their use for the purposes set out in the *ASPO*, *FPSO*, and *PromO*. It should be noted, in particular, that approval of the authors is required, especially for online publication of theses, as they have the right of first publication.

Contractual agreements on the transfer of the rights of use and exploitation between TUM and the examination candidate are only justifiable on the basis of existing examination law if the transfer is made voluntarily and only after the examination process has been completed. This ensures that matters of rights have no influence on the assessment of the thesis. Transfer of rights prior to completion of the examination process is generally not permitted, as the assessment of the thesis would take place afterwards. Due to the existing dependency relationship, the voluntary nature of a transfer cannot be guaranteed. Therefore, the topic of the thesis should be chosen so as not to require a prior transfer of rights.

In individual cases, a transfer to TUM after completion of the examination process may be permissible if the university has legitimate interests in being granted rights of use. The granting of rights must be limited to the extent necessary; as a rule, students/doctoral candidates must retain **at least non-exclusive rights of use for private purposes**.

In the case of theses/dissertations in collaboration with industrial companies, students/doctoral candidates generally enter into an agreement with the industrial company in which they grant the latter a right of use to the resulting rights (see also Section IV below).

5. How should inventions be dealt with?

Any rights to inventions belong to the respective inventors. Sole authorship of their work by the students/doctoral candidates does not in all cases preclude that the university supervisors are (co-)inventors.

Inventions/co-inventions of TUM employees are subject to the German Employee Inventions Act (*ArbErfG*). Since students/doctoral candidates are not employees of TUM, they, as independent (co-)inventors, hold the rights to their inventions. In the case of theses/dissertations in collaboration with industrial companies, students/doctoral candidates will, as a rule, also enter into an agreement with the industrial company under which they may grant rights emerging from the work to the industrial company.

This does not apply, however, if the students/doctoral candidates are employees of TUM and these inventions have been created as part of their duties under the employment contract.

However, examination law governing the relationship between TUM and the students/doctoral candidates stipulates that agreements to this effect must not be entered into generally, but in individual cases only after the examination process has been concluded, if the university has legitimate interest in being granted rights of use. Again, the granting of rights must be limited to the extent necessary; as a rule, students/doctoral candidates must retain **at least non-exclusive rights of use for private purposes**. In the case of theses/dissertations in collaboration with industrial companies, these options will be limited by the requirements of these companies.

IV. Information for Students/Doctoral Candidates

1. What needs to be considered when entering into agreements with industrial companies?

When writing external theses/dissertations, students/doctoral candidates are, as a rule, presented with contracts under which the industrial company sets out the student's/doctoral candidate's position within the company's organizational structure, the confidentiality of the company's internal and proprietary data, intellectual property rights, rights of exploitation and use, liability and, if applicable, any allowance to be paid. These contracts are private contracts that cannot be reviewed by the TUM Legal Office. However, for their own protection, students/doctoral candidates should review their contracts or have them reviewed, in particular with regard to compliance with the relevant requirements and their own interests.

2. What needs to be considered in terms of insurance law?

When it comes to insurance issues in the context of **accident insurance coverage**, it is important to distinguish where the thesis/dissertation is being written:

- Where theses/dissertations are prepared within the organizational scope of responsibility of the university and there is a substantial direct temporal and spatial connection with TUM and its institutions, the authors will be covered by the statutory accident insurance of the *Bayerische Landesunfallkasse*. However, any activities in the private or domestic sphere will not be covered.
- Where theses/dissertations are prepared on the premises of an industrial company, there

will only be statutory accident insurance by the industrial company's insurer if the authors are fully integrated in the company's organizational structure, including employment contract and payment of a salary. There will be no statutory accident insurance if a thesis/dissertation is prepared independently, with flexible working hours and without an employment contract.

Students/doctoral candidates should check their insurance status with the industrial companies in advance, as under most of the agreements entered into with these companies there will be no integration in terms of social security and thus no liability. The entry into an agreement for the granting of rights of use or exploitation alone will not be sufficient to establish statutory accident insurance. Moreover, there will be no statutory accident insurance for the time spent at an industrial company, as the statutory coverage resulting from enrollment or from the status of doctoral candidacy or membership of TUM does not cover theses/dissertations prepared outside of the organizational control of the university.

- In case there is no insurance coverage in accordance with the above criteria, students/doctoral candidates are advised to take out private accident insurance, unless accident insurance is covered by their health insurance. In addition, it may be necessary to take out occupational disability insurance if the private accident insurance does not cover partial or total disability. Other employment relationships, for example, employment at TUM, should be taken into account.
- With regard to **liability**, the following must be borne in mind: As a rule, students/doctoral candidates will be liable for any damage caused by them pursuant to the statutory regulations, as the work on theses/dissertations serves their own interests and is not subject to any employment contract. To avoid any financial risks, students/doctoral candidates are therefore encouraged to take out private liability insurance. They should ensure that the insurance company classifies any work on the thesis/dissertation as private work and not as work subject to an employment contract. Where applicable, a laboratory insurance is recommended.

Points of Contact:

The team at TUM CST– Legal Affairs (<https://www.tum.de/studium/tumcst/teams-cst#c64671>) is available to answer any questions concerning examination law. For all other questions, please contact Unit 53 of the TUM Legal Office (<https://campus.tum.de/tumonline/wborggruppen.gruppen?pOrgNr=31954>).