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Recommendations of the GI for Conducting Student Thesis Papers in Industry

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A Word of Introduction



- **What are ‘External Theses’ and how can the GI Recommendations help to guide them?**
 - According to the GI, “External theses are thesis papers that students complete as part of their studies in a non-university setting.”
 - They are “an opportunity to foster and facilitate interactions between companies and universities.”,
 - **and, they involve by definition** “the participation of an external partner (outside of the faculty) in defining the tasks and supervising the thesis.”
- **What don’t they cover?**
 - “The (...) recommendations do not apply to thesis work conducted at university-affiliated research institutions” - e.g. Fraunhofer institutes, FZI etc.



Differences Between the Types of Higher Education Institutions

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- **External vs. Internal thesis papers**
 - **External thesis papers** are more common at universities of applied sciences (Fachhochschulen) and at vocational academies (Berufsakademien)
 - **Internal thesis papers** are more common at research-oriented universities
- **The GI-Recommendations are thus:**
 - primarily aimed at universities
 - guidelines for students, professors and corporate partners for carrying out external theses successfully
 - Can facilitate a productive exchange of knowledge that benefits all parties.



Acknowledgements

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- **Who are the Authors of the recommendations?**
 - Ralf Reussner
 - Bernd Voigt
- **Special thanks go to the following contributors from the University of Oldenburg for large parts of the text:**
 - Prof. Dr. H.-J. Appelrath†
 - Dr. Grawunder
- **Contact:** Gesellschaft für Informatik e.V. (GI), Ahrstraße 45
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The Roles Involved in an External Thesis



- **Student:** a person wishing to complete a thesis paper as described in the study and/or exam regulations.
- **First Supervisor (Topic Creator):** the person that supervises the thesis in accordance with the regulations and is usually a professor or private lecturer from the faculty or department.
- **Second* Supervisor:** is usually a member of the same faculty or research group as the first supervisor, but can also be another authorized university member, e.g. a PD Prof. or other faculty.

***Note:** that the first and second supervisor evaluate the thesis together, as described in the study/examination regulations.

The Roles Involved in an External Thesis (cont.)



- **Internal Supervisor (University Supervisor):** is usually a research associate and member of the collegial circle of the first supervisor.
- **External Partner:** the person from the company who is interested in the student working on a specific topic and serves as a contact person for the first supervisor.
- **External Supervisor:** is appointed by the external partner to supervise the thesis on behalf of the company, attend the final presentation, and provide an assessment to the first supervisor.



The GI Recommendations

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1. The **cooperation agreement (CA)** should serve as a framework between the first supervisor and the external partner for the thesis
2. **Supervision arrangements** and an **internship contract** are made between the student and the involved parties
3. **Confidentiality agreements** are optional and should be limited appropriately regarding document usage and access
4. **Rights of use and exploitation** corresponding to the thesis must be added to the CA and granted by the student



The GI Recommendations

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5. The university does not assume additional **liability and costs for external theses** and no payment for such work is advised.
6. A **continuous coordination process** is recommended between all involved parties.
7. The primary **place of work** is the university. Deviations must be regulated by agreement in the internship contract.
8. **Topic selection:** is best agreed in advance between the first supervisor and the external partner. It should clarify important details regarding the topic and the support by the company.



The GI Recommendations



9. **Work schedule & topic refinement** should be discussed between the student and all supervisors.
 - The schedule should include **continuous coordination** with all persons and regular meetings with the external supervisor.
 - Key details must be documented in the **internship contract** between the student and external partner.
10. **Evaluation** is conducted by the first and second supervisor in accordance with exam regulations.
 - The evaluation must be conducted in accordance with the exam regulations of the university.
 - It is possible to allow the external supervisor to also provide assessment.



The GI Recommendations

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11. After completion of the thesis the first supervisor should:

- a. Discuss the results and experiences of the joint supervision with the external partner.
- b. Also, plan to talk to the student about their experiences at the company.